

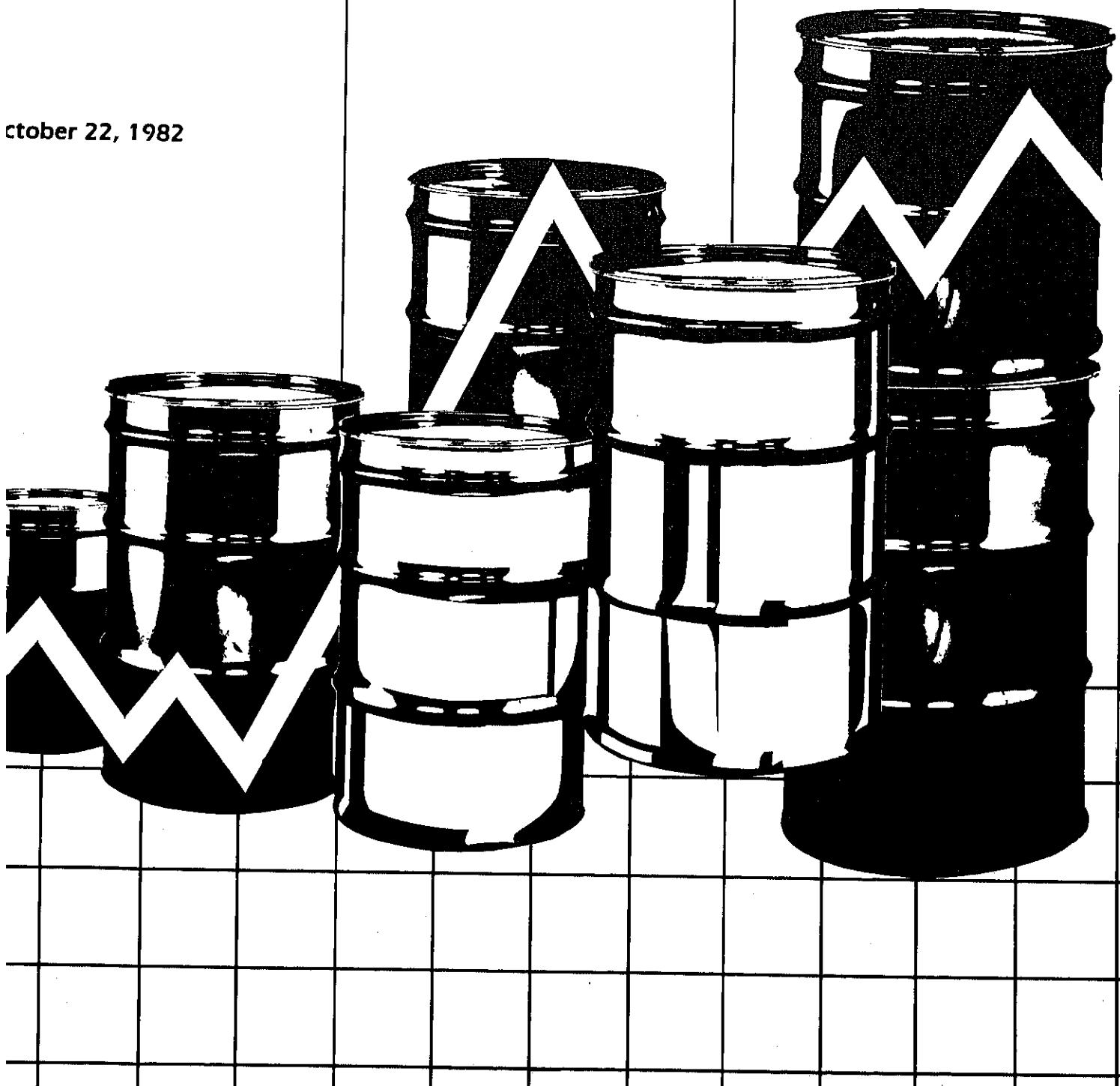
# Weekly Petroleum Status Report



Energy Information Administration  
**U.S. Department of Energy**



October 22, 1982



The "Weekly Petroleum Status Report" is published each Friday by the Energy Information Administration. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation. It presents current statistics in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policymakers, consumers, analysts, and State and local governments.

## Highlights

### Refinery Operations

Crude oil inputs to refineries averaged 12.2 million barrels a day for the week ending October 15, 1982. Refinery capacity utilization averaged 72.1 percent during the week. During the four weeks ending October 15, 1982, motor gasoline production averaged 6.4 million barrels a day, and distillate fuel oil production averaged 2.7 million barrels a day.

### Stocks

On October 15, 1982, stocks of crude oil stood at 349.5 million barrels, which is about 3 percent below the level of one year ago. Stocks of motor gasoline, at 228.3 million barrels, were about 4 percent below the level a year ago. Distillate fuel oil stocks stood at 161.3 million barrels, which is about 21 percent below the level a year ago. Stocks of residual fuel oil stood at 58.6 million barrels, which is about 27 percent below the level a year ago.

### Imports

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 3.9 million barrels a day for the four weeks ending October 15, 1982, about 30 percent below their average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.2 million barrels a day for the four-week period ending October 15, 1982.

### Products Supplied

Total petroleum products supplied averaged 15.3 million barrels a day for the four-week period ending October 15, 1982, which is about 3 percent lower than during the comparable period last year. Motor gasoline was supplied at a rate of 6.5 million barrels a day, which is about 2 percent below the rate a year ago. Distillate fuel oil was supplied at a rate of 2.7 million barrels a day, about 1 percent above the rate one year ago.

### Crude Oil Price

The estimated weighted average international price of crude oil for October 1982 remains at \$33.11 a barrel.

### Spot Market Product Prices

For the week ending October 15, 1982, the average spot market price of 98 octane gasoline on the Rotterdam market increased 88 cents to \$41.03 a barrel; the gasoil price increased 67 cents to \$42.96 a barrel, and the price of residual fuel oil increased 15 cents to \$30.48 a barrel. On the New York market, the average spot price of 89 octane regular gasoline decreased 22 cents to \$38.74 a barrel; the price of No. 2 heating oil increased 42 cents to \$42.42 a barrel, and the residual fuel oil price increased 65 cents to \$31.00 a barrel.

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Note: The Weather Summary is not included in this week's issue. With the end of the cooling season, the cooling degree-days table has been discontinued.

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**U.S. Petroleum Balance Sheet**  
(Thousands of Barrels per Day)

	Four-Week Averages For Period Ending 10/15/82	10/15/81	Percent Change	Cumulative Daily Averages 287 Days 1982	1981	Percent Change
<b>Crude Oil Supply</b>						
(1) Domestic Production <sup>1</sup>	8,663	8,584	0.9	8,663	8,569	1.0
(2) Net Imports (Including SPR) <sup>2</sup>	3,118	4,350	-28.3	3,193	4,235	-24.6
(3) Gross Imports (Excluding SPR)	3,164	4,116	-23.1	3,250	4,210	-22.8
(4) SPR Imports	183	444	--	163	252	--
(5) Exports	E229	210	9.0	E220	227	-3.1
(6) SPR Stocks Withdrawn (+) or Added (-) <sup>3</sup>	-190	-493	--	-176	-343	--
(7) Other Stocks Withdrawn (+) or Added (-) <sup>3</sup>	144	-29	--	49	72	--
(8) Used Directly and Losses	E-63	-66	--	E-66	-62	--
(9) Unaccounted-for Crude	556	-64	--	193	61	--
(10) Crude Oil Input to Refineries	12,228	12,281	-0.4	11,856	12,532	-5.4
<b>Other Supply</b>						
(11) NGL Production	E1,521	1,605	-5.2	E1,533	1,609	-4.7
(12) Other Hydrocarbon Input	E58	65	-10.1	E60	50	0.7
(13) Crude Used Directly as Product	60	62	--	62	57	--
(14) Processing Gain	581	475	22.3	529	496	6.6
(15) Net Product Imports <sup>4</sup>	737	1,192	-38.2	919	1,237	-25.7
(16) Gross Product Imports <sup>4</sup>	1,249	1,611	-22.5	1,479	1,578	-6.3
(17) Product Exports	E512	419	22.3	E560	341	64.0
(18) Product Stocks Withdrawn (+) or Added (-) <sup>5</sup>	91	60	--	312	81	--
(19) Total Product Supplied for Domestic Use	15,276	15,739	-2.9	15,261	16,062	-5.0
<b>Products Supplied</b>						
(20) Motor Gasoline	6,459	6,620	-2.4	6,556	6,601	-0.7
(21) Naphtha-type Jet Fuel	200	200	-0.1	211	202	4.3
(22) Kerosene-type Jet Fuel	792	781	1.4	795	816	-2.5
(23) Kerosene	141	114	24.6	124	116	6.5
(24) Distillate Fuel Oil	2,683	2,658	0.9	2,700	2,783	-3.0
(25) Residual Fuel Oil	1,451	1,883	-22.9	1,737	2,101	-17.3
(26) Other Oils	3,550	3,483	1.9	3,138	3,443	-8.9
(27) Total Products Supplied	15,276	15,739	-2.9	15,261	16,062	-5.0

Petroleum Stocks (Millions of Barrels)	10/15/82	10/08/82	10/15/81	Percent Change from Previous Week	Year Ago
Crude Oil (Excluding SPR) <sup>6</sup>					
Motor Gasoline	349.5	R357.9	359.6	-2.3	-2.8
Naphtha-type Jet Fuel	228.3	R231.2	236.6	-1.3	-3.5
Kerosene-type Jet Fuel	5.5	5.4	6.3	1.5	-12.9
Kerosene	33.8	R32.3	36.6	4.6	-7.6
Distillate Fuel Oil	10.5	R10.7	13.4	-2.2	-21.6
Residual Fuel Oil	161.3	R158.2	204.5	1.9 <sup>7</sup>	-21.2
Unfinished Oils	58.6	R60.4	80.1	-2.9	-26.8
Other Oils <sup>8</sup>	117.5	119.0	118.9	-1.3	-1.2
Total Stocks (Excluding SPR)	E184.8	E186.1	217.7	-0.7	-15.1
Crude Oil in SPR	1,149.7	R1,161.3	1,273.7	-1.0	-9.7
Total Stocks (Including SPR)	280.8	278.7	206.3	0.7	36.1

R=EIA revision.

E=Estimate based on monthly data.

1 Includes lease condensate.

2 Net Imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5).

3 The December 1980 crude oil stocks level used in the calculation of the 1981 "Other Stocks Withdrawn or Added" is the 1981-basis crude oil stock level published in the 1981 "Petroleum Supply Annual" (380.2 million barrels). The difference between the 1980- and the 1981-basis crude oil stock levels is the inclusion of crude oil in transit from Alaska in the figures for January 1981 forward. The December 1980 crude oil stock level shown on page 6 is the 1980-basis figure published in the 1980 "Petroleum Statement, Annual" and is consistent with other 1980 figures shown.

4 Includes unfinished oils and natural gas plant liquids for processing.

5 Includes an estimate of minor product stock change based on monthly data.

6 Includes crude oil in transit to refineries.

7 Includes stocks of finished motor gasoline and stocks of motor gasoline blending components.

8 Included are stocks of all other oils such as aviation gasoline, natural gas liquids (including ethane), petrochemical feedstocks, special naphthas, tube oils, wax, coke, asphalt, road oil, and miscellaneous oils. For the current two weeks, stocks of these minor products are estimated from monthly data.

Sources:

- 1980: EIA, "Petroleum Statement, Annual (Final Summary)."
- 1981: EIA, "Petroleum Supply Annual."
- January-July 1982: EIA, "Petroleum Supply Monthly."

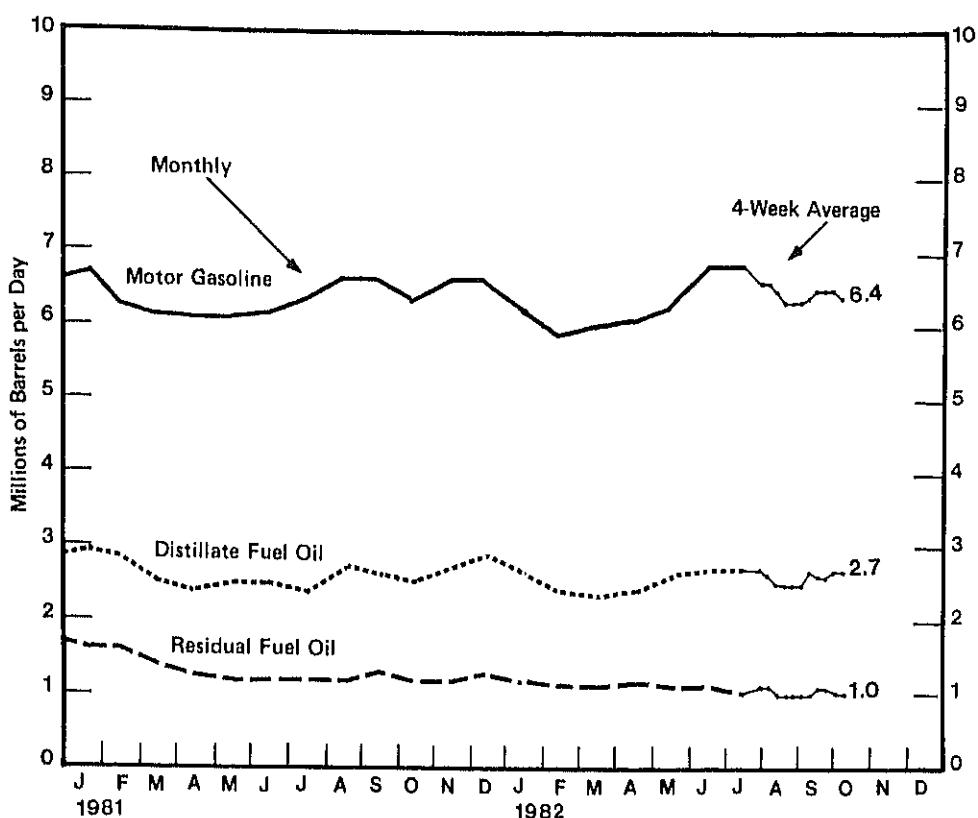
August 6, 1982-Current Week: Estimates based on EIA weekly data.

Note: Due to independent rounding, individual product detail may not add to total.

The percentages shown are calculated using unrounded numbers.



**J.S. Refinery Production by Product**  
(Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Motor Gasoline	7.0	6.9	6.5	6.3	6.3	6.6	6.4	6.4	6.4	6.1	6.5	6.6
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel	3.0	2.8	2.6	2.5	2.5	2.6	2.7	2.5	2.7	2.6	2.7	2.9
Residual Fuel	1.8	1.8	1.6	1.6	1.5	1.6	1.5	1.4	1.5	1.5	1.6	1.7
<b>1981<sup>1</sup></b>												
Motor Gasoline <sup>2</sup>	6.7	6.3	6.2	6.1	6.1	6.2	6.4	6.6	6.6	6.4	6.6	6.6
Jet Fuel	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	0.9
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Distillate Fuel <sup>2</sup>	3.0	2.8	2.5	2.4	2.5	2.5	2.4	2.7	2.6	2.5	2.7	2.9
Residual Fuel <sup>2</sup>	1.6	1.6	1.4	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.3
<b>1982<sup>1</sup></b>												
Motor Gasoline <sup>2</sup>	6.2	5.9	6.0	6.1	6.3	6.8	6.8					
Jet Fuel	0.9	1.0	1.1	1.0	0.9	0.9	1.0					
Kerosene	0.1	0.2	0.1	0.1	0.1	0.1	0.1					
Distillate Fuel <sup>2</sup>	2.6	2.4	2.3	2.4	2.6	2.7	2.7					
Residual Fuel <sup>2</sup>	1.2	1.1	1.1	1.2	1.1	1.1	1.0					
<b>Average for Four-Week Period Ending:</b>												
<b>1982<sup>1</sup></b>	<b>8/6</b>	<b>8/13</b>	<b>8/20</b>	<b>8/27</b>	<b>9/3</b>	<b>9/10</b>	<b>9/17</b>	<b>9/24</b>	<b>10/1</b>	<b>10/8</b>	<b>10/15</b>	
Motor Gasoline	6.6	6.6	6.5	6.3	6.3	6.3	6.4	6.5	6.5	6.5	6.4	
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Kerosene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	
Distillate Fuel <sup>2</sup>	2.7	2.6	2.5	2.5	2.5	2.5	2.7	2.6	2.6	2.7	2.7	
Residual Fuel <sup>2</sup>	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	1.0	

<sup>1</sup> Production statistics represent net production (i.e., refinery output minus refinery input).

<sup>2</sup> Production statistics for 1981 and 1982 should not be directly compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

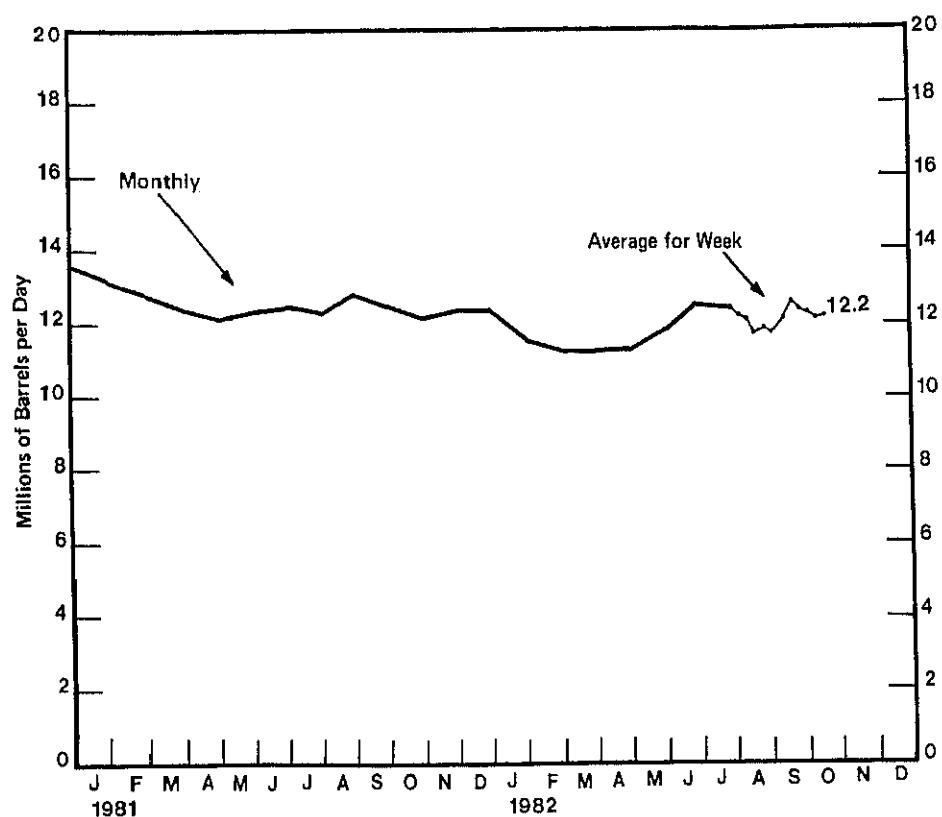
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 8, 1982-Current Week: Four-week averages based on EIA weekly data.

**Crude Oil Inputs to Refineries  
(Millions of Barrels per Day)**



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	14.3	14.2	13.7	13.5	13.3	13.7	13.3	13.0	13.3	12.8	13.1	13.6
	13.2	12.9	12.4	12.1	12.3	12.4	12.3	12.9	12.5	12.1	12.3	12.3
	11.3	11.3	11.4	11.8	12.5	12.4						
	13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15		
	.1	11.7	11.9	11.8	12.1	12.6	12.4	12.3	12.1	12.2		

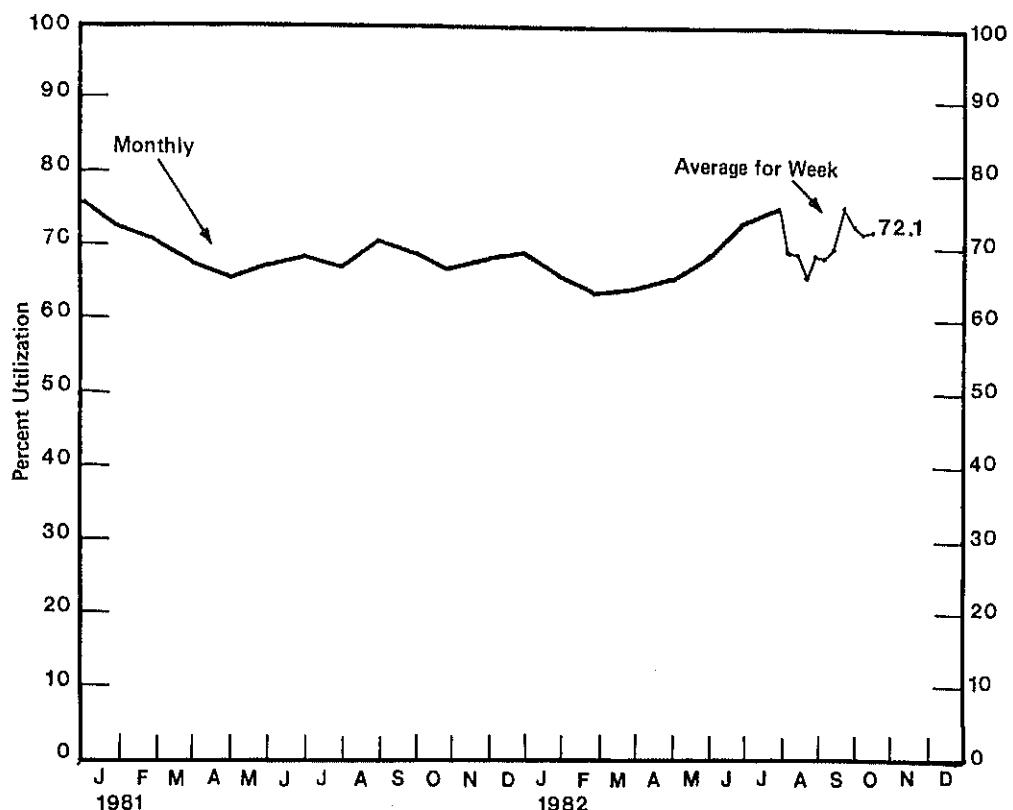
Statement, Annual (Final Summary)."

apply Annual."

"Petroleum Supply Monthly."

week: Estimates based on EIA weekly data.

**Refinery Capacity Utilization  
(Percent Utilization)**



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	82.1	79.9	76.8	75.7	74.8	77.0	74.5	72.7	73.6	70.6	73.0	75.5
1981	72.5	70.8	67.7	65.7	67.2	68.1	67.4	70.6	68.4	67.0	68.2	69.2
1982	66.3	64.6	64.9	65.5	68.0	73.6	75.2					
<b>Average for Week Ending:</b>												
1982	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	
	69.4	69.1	65.9	69.0	68.7	70.0	75.2	73.5	72.8	R71.8	72.1	

R=EIA revision.

Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982-Current Week: Estimates based on EIA weekly data.

**Stocks of Crude Oil and Petroleum Products,<sup>1</sup> U.S. Totals  
(Millions of Barrels)**

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Crude Oil <sup>2,3</sup>	367.6	366.0	367.4	379.8	383.4	381.5	378.7	387.2	376.4	378.5	373.1	358.2
Motor Gasoline	262.1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	268.1	246.4	257.2	261.3
Jet Fuel	38.4	38.3	38.7	39.3	41.3	42.3	40.9	40.3	42.2	43.1	43.9	42.0
Kerosene	14.0	13.3	13.1	13.4	13.8	13.9	14.3	13.3	12.9	12.5	12.7	11.6
Distillate Fuel Oil	212.4	191.6	177.8	177.2	183.4	196.5	213.8	226.3	232.4	225.7	222.4	205.1
Residual Fuel Oil	97.2	91.0	88.3	85.3	87.7	87.8	85.6	86.9	87.9	91.0	93.2	91.8
Unfinished Oils	112.4	111.3	116.9	123.5	130.6	133.1	131.6	129.6	132.1	131.1	126.3	123.9
Other Oils	165.9	166.3	172.7	185.6	192.4	199.8	208.6	214.7	212.4	204.8	201.4	190.5
Total Stocks (Excl. SPR)	1,260.0	1,262.1	1,266.7	1,275.9	1,295.6	1,319.7	1,334.2	1,357.4	1,354.3	1,333.0	1,330.1	1,284.4
Crude Oil In SPR	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	92.8	96.6	102.3	107.8
Total Stocks (Incl. SPR)	1,361.2	1,343.3	1,347.8	1,367.1	1,386.8	1,410.9	1,425.4	1,448.6	1,447.2	1,429.7	1,432.4	1,392.2
<b>1981</b>												
Crude Oil <sup>2</sup>	374.0	378.2	393.0	397.6	393.7	384.7	385.9	362.0	356.0	364.0	366.0	363.5
Motor Gasoline <sup>4</sup>	276.1	284.0	285.0	272.1	258.3	241.6	227.7	233.3	237.1	236.1	248.4	253.0
Jet Fuel	39.6	38.6	39.0	40.4	44.6	44.9	44.8	44.7	43.1	42.7	42.0	41.1
Kerosene	10.5	10.6	11.2	12.0	12.8	13.4	13.3	13.8	13.9	12.7	12.3	11.0
Distillate Fuel	179.4	172.6	164.3	164.6	171.8	179.9	186.3	200.2	207.3	201.2	200.1	191.5
Residual Fuel	82.1	77.9	74.8	72.9	78.1	69.4	69.3	74.9	80.2	79.9	81.4	78.0
Unfinished Oils	121.5	122.3	126.2	126.5	126.3	126.1	126.1	124.5	118.4	119.6	118.4	111.3
Other Oils	192.2	188.6	188.9	194.5	202.7	207.1	212.1	219.0	220.7	214.0	212.3	203.9
Total Stocks (Excl. SPR)	1,275.3	1,272.6	1,280.3	1,280.5	1,288.3	1,267.1	1,265.4	1,272.6	1,276.7	1,270.0	1,278.9	1,263.3
Crude Oil In SPR	112.5	116.1	120.9	134.2	160.1	163.1	173.1	184.7	199.2	214.8	222.5	230.3
Total Stocks (Incl. SPR)	1,387.8	1,388.5	1,401.2	1,414.6	1,438.3	1,430.2	1,438.6	1,457.2	1,476.0	1,484.8	1,501.5	1,483.6
<b>1982</b>												
Crude Oil <sup>2</sup>	370.9	371.0	365.7	355.5	348.5	342.8	344.6					
Motor Gasoline <sup>4</sup>	262.1	262.1	247.9	222.8	214.9	219.7	226.0					
Jet Fuel	37.2	37.0	42.5	44.1	41.8	40.1	39.8					
Kerosene	9.6	9.1	8.8	9.6	8.9	9.2	9.1					
Distillate Fuel	166.0	146.7	127.7	108.8	114.5	124.5	148.1					
Residual Fuel Oil	68.2	58.1	57.3	53.6	59.1	60.6	59.0					
Unfinished Oils	116.7	116.9	115.8	118.9	117.8	117.5	117.8					
Other Oils	195.0	189.3	186.6	180.9	182.8	183.7	182.4					
Total Stocks (Excl. SPR)	1,226.6	1,190.2	1,152.4	1,094.3	1,088.4	1,098.1	1,126.8					
Crude Oil In SPR	235.3	241.2	248.5	265.5	281.0	264.1	267.2					
Total Stocks (Incl. SPR)	1,460.9	1,431.4	1,400.9	1,349.9	1,349.4	1,362.3	1,393.9					
<b>Week Ending:</b>												
<b>1982</b>	<b>8/6</b>	<b>8/13</b>	<b>8/20</b>	<b>8/27</b>	<b>9/3</b>	<b>9/10</b>	<b>9/17</b>	<b>9/24</b>	<b>10/1</b>	<b>10/8</b>	<b>10/15</b>	
Crude Oil <sup>2</sup>	356.9	355.1	361.2	358.6	355.4	359.6	363.5	357.6	357.4	R357.9	349.5	
Motor Gasoline <sup>4</sup>	222.4	223.8	222.8	220.9	223.6	225.1	225.5	228.8	230.6	R231.2	228.3	
Jet Fuel	40.6	40.0	38.9	39.6	39.9	39.4	39.7	40.1	39.7	R37.8	39.3	
Kerosene	9.9	9.8	10.0	10.1	10.1	10.1	10.0	10.2	10.2	R10.7	10.6	
Distillate Fuel Oil	145.2	147.8	149.4	164.6	156.2	159.2	158.0	158.7	154.5	R168.2	161.3	
Residual Fuel Oil	54.9	53.4	51.2	48.6	51.5	54.0	55.8	57.8	60.8	R60.4	58.6	
Unfinished Oils	119.4	116.6	119.3	119.9	118.7	119.0	118.3	117.7	118.8	119.0	117.5	
Other Oils <sup>5</sup>	E195.1	E196.0	E196.2	E194.3	E195.0	E195.3	E195.5	E187.1	E187.4	E186.1	E184.8	
Total Stocks (Excl. SPR)	1,143.3	1,142.6	1,149.0	1,146.4	1,150.6	1,161.6	1,155.3	1,158.0	1,159.3	R1,161.3	1,149.7	
Crude Oil In SPR	267.8	288.9	270.5	272.6	273.9	274.7	275.5	276.8	277.6	278.7	280.8	
Total Stocks (Incl. SPR)	1,411.1	1,411.5	1,419.4	1,419.1	1,424.3	1,438.3	1,431.8	1,434.8	1,437.0	R1,440.0	1,430.6	

R=EIA revision.

E=Estimated. See definition of "Stock Change (Refined Products)" for explanation.

1 Product stocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks held at natural gas processing plants are included in "Other Oils" and in totals. All stock levels are as of the end of the period.

2 Crude oil stocks include those stocks held at refineries, in pipelines, in lease tanks, and in transit to refineries, and do not include those held in the Strategic Petroleum Reserve.

3 The December 1980 crude oil stock level shown here is from the 1980 "Petroleum Statement, Annual" and is not the same as the 1981--basis crude oil stock level used in the calculations for the U.S. Petroleum Balance Sheet (see footnote 3, page 1).

4 Motor gasoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components, shown in the "Petroleum Supply Annual" and the "Petroleum Supply Monthly." The 1982 weekly motor gasoline stocks statistics are comparable to the 1981 and 1982 monthly statistics.

5 Weekly totals for stocks of other oils, which include aviation gasoline, ethane, petrochemical feedstocks, special naphthas, lube oil, wax, coke, asphalt, road oil, and miscellaneous oils, are estimated using monthly data.

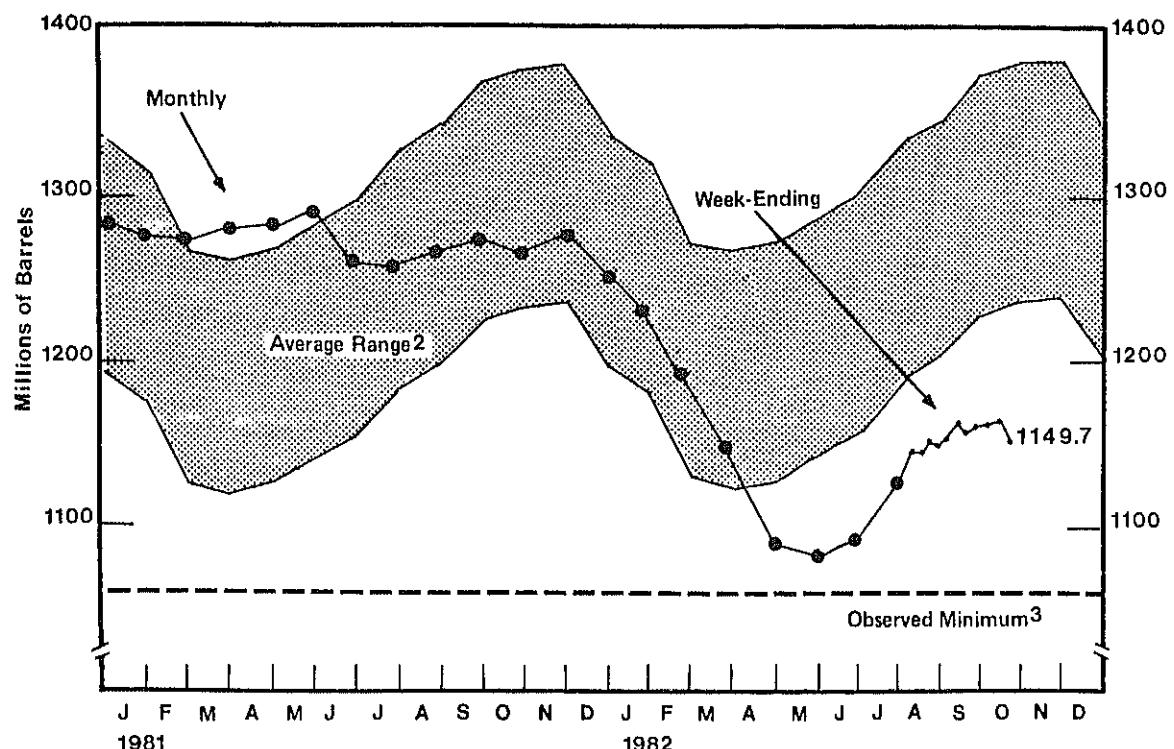
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

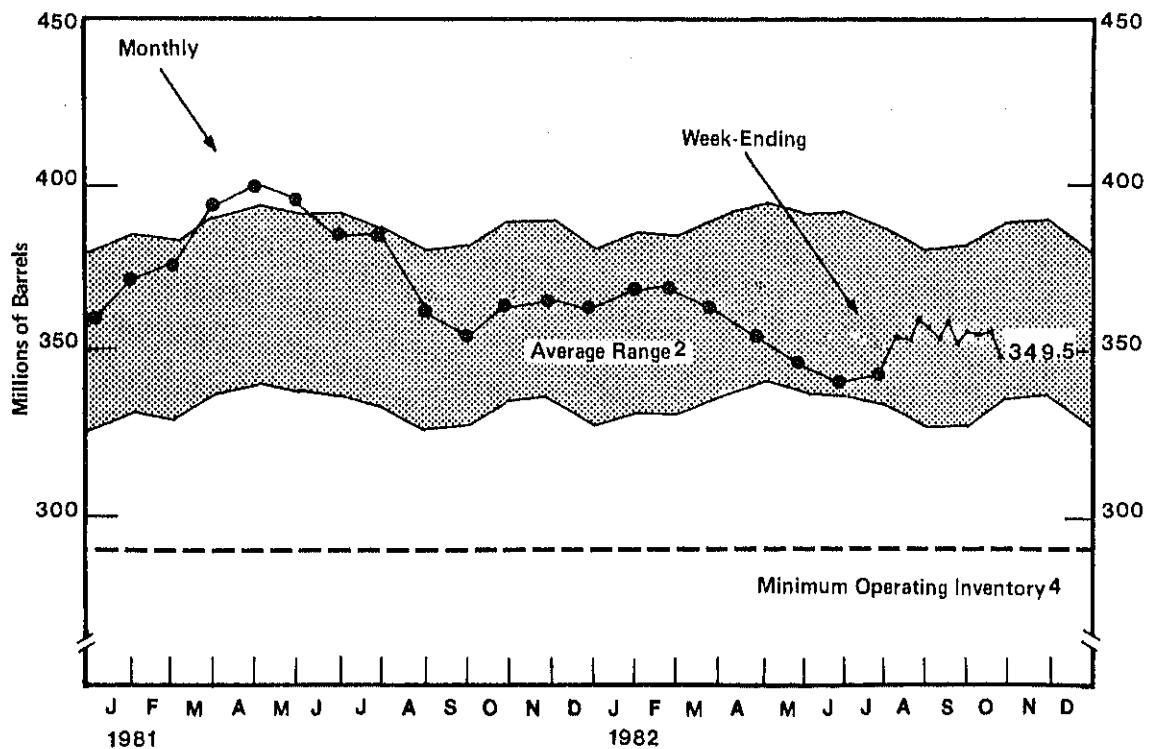
• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982-Current Week: Estimates based on EIA weekly data.

Stocks of Crude Oil<sup>1</sup> and Petroleum Products, U.S. Total  
(Millions of Barrels)



Stocks of Crude Oil<sup>1</sup>, U.S. Total  
(Millions of Barrels)



<sup>1</sup> Excludes stocks held in the Strategic Petroleum Reserve and includes crude oil in transit to refineries.

<sup>2</sup> Average level, width of average range, and observed minimum are based on three years of monthly data: January 1979–December 1981. The seasonal pattern is based on seven years of monthly data: January 1974–December 1980.

<sup>3</sup> The observed minimum for total stocks (1069.9) occurred in March 1979.

<sup>4</sup> The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (290 million barrels for crude oil).

Source: • Ranges and Seasonal Patterns: 1974–1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981, EIA, "Petroleum Statement, Monthly."

• Monthly Data: 1981, EIA, "Petroleum Supply Annual;" January–July 1982, EIA, "Petroleum Supply Monthly."

• August 6, 1982–Current Week: Estimates based on EIA weekly data.

**Stocks of Motor Gasoline by District<sup>1</sup>  
(Millions of Barrels)**

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
East Coast (PAD 1)	70.2	75.0	73.7	74.8	75.2	76.4	72.9	72.8	75.7	69.9	69.2	71.1
Midwest (PAD 2)	83.1	85.0	89.0	83.3	76.9	79.1	78.9	76.8	77.5	70.9	72.8	76.9
Gulf Coast (PAD 3)	69.8	73.7	80.9	75.7	74.3	73.2	73.2	71.4	68.3	69.8	75.8	73.8
Rocky Mountain (PAD 4)	8.8	9.3	9.7	9.4	8.9	8.4	6.6	6.5	6.2	6.6	7.8	8.6
West Coast (PAD 5)	30.3	31.4	29.4	28.6	27.8	27.9	29.1	30.2	30.5	29.2	31.6	31.0
<b>Total U.S.<sup>2</sup></b>	262.1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	258.1	246.4	257.2	261.3
<b>1981</b>												
East Coast (PAD 1)	71.7	74.2	79.5	77.9	73.1	69.5	62.7	64.3	69.6	69.6	69.7	69.5
Midwest (PAD 2)	86.0	90.4	89.7	84.2	80.1	72.4	65.9	66.7	65.3	66.0	69.2	72.6
Gulf Coast (PAD 3)	77.2	79.6	78.5	76.2	72.2	65.9	64.0	68.6	68.5	65.0	70.6	69.5
Rocky Mountain (PAD 4)	9.7	10.3	10.2	9.4	8.6	7.4	6.5	6.0	5.8	6.3	7.7	8.5
West Coast (PAD 5)	31.5	29.5	26.9	24.4	24.3	26.3	28.6	27.8	27.9	29.2	31.2	32.9
<b>Total U.S.<sup>2</sup></b>	276.1	284.0	285.0	272.1	258.3	241.6	227.7	233.3	237.1	236.1	248.4	253.0
<b>1982</b>												
East Coast (PAD 1)	71.7	69.6	67.1	61.7	63.6	66.0	63.1					
Midwest (PAD 2)	78.6	79.1	74.8	63.2	56.8	56.6	62.6					
Gulf Coast (PAD 3)	70.2	69.2	68.0	63.4	63.6	65.0	66.0					
Rocky Mountain (PAD 4)	9.6	9.9	10.1	8.9	7.7	6.5	5.8					
West Coast (PAD 5)	32.0	34.3	27.8	25.5	23.3	25.7	28.4					
<b>Total U.S.<sup>2</sup></b>	262.1	262.1	247.9	222.8	214.9	219.7	226.0					
<b>Week Ending:</b>												
<b>1982</b>	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	
East Coast (PAD 1)	64.1	62.5	63.2	61.9	62.7	62.6	62.9	62.4	63.1	R62.1	61.6	
Midwest (PAD 2)	65.3	66.8	65.7	66.2	67.1	67.6	68.1	69.5	70.0	70.7	70.2	
Gulf Coast (PAD 3)	60.7	62.5	61.0	60.6	62.1	63.2	63.2	66.1	66.0	R66.9	64.4	
Rocky Mountain (PAD 4)	5.6	5.3	5.5	5.4	5.0	5.2	5.5	5.1	5.5	5.7	6.1	
West Coast (PAD 5)	26.7	26.8	27.4	26.8	26.6	26.4	25.9	25.6	25.9	25.8	25.9	
<b>Total U.S.<sup>2</sup></b>	222.4	223.8	222.8	220.9	223.6	225.1	225.5	228.8	230.6	R231.2	228.3	

R=EIA revision.

1 Districts are Petroleum Administration for Defense (PAD) Districts.

2 PAD district data may not add to total due to independent rounding.

Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1980 Regional Data: Unpublished data based on "Petroleum Statement, Annual (Final Summary)."

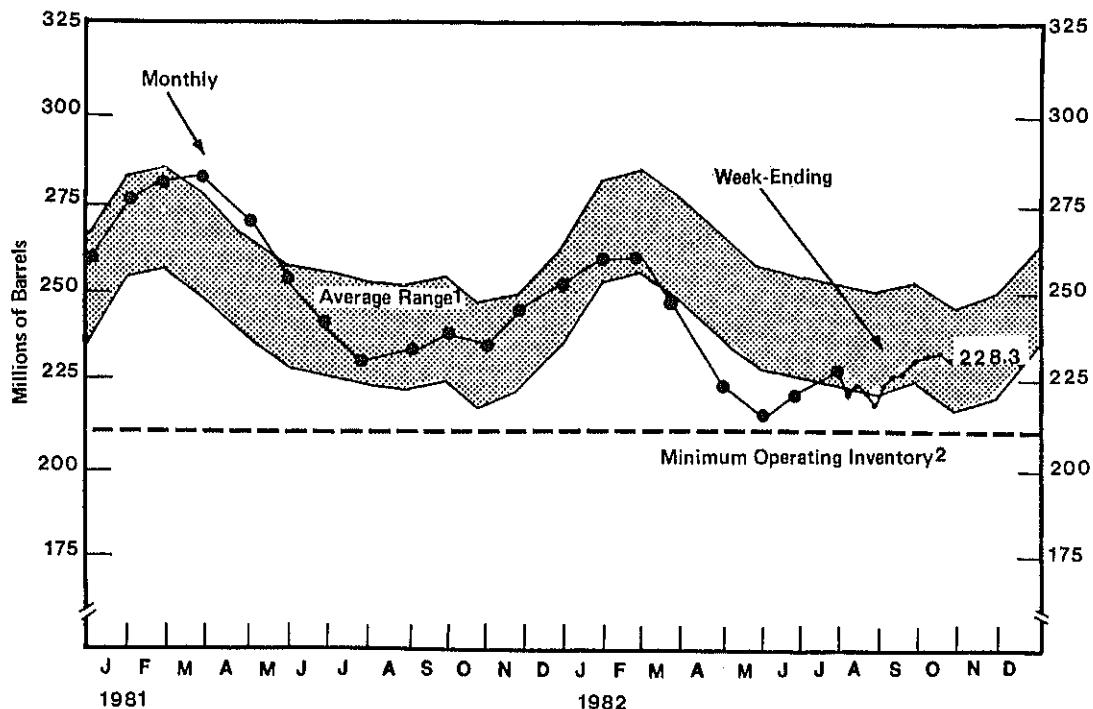
• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

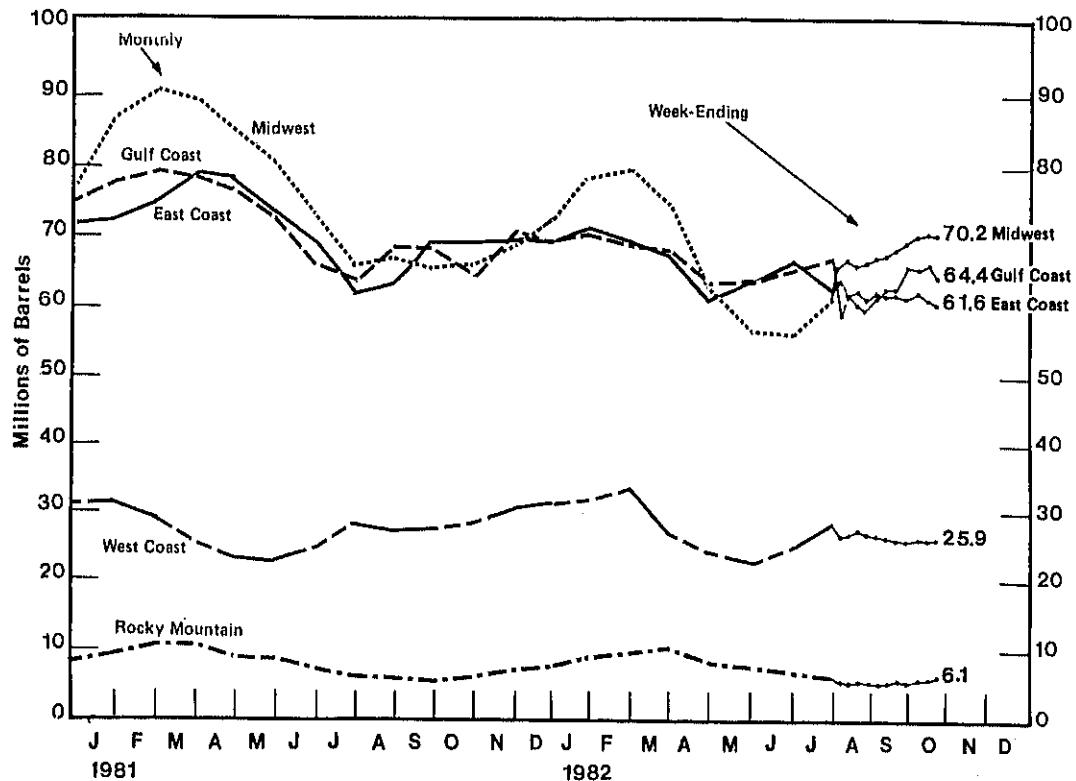
• August 6, 1982-Current Week: Estimates based on EIA weekly data.

Note: Motor gasoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components.

**Stocks of Motor Gasoline, U.S. Total  
(Millions of Barrels)**



**Stocks of Motor Gasoline by District  
(Millions of Barrels)**



<sup>1</sup> Average level and width of average range are based on three years of monthly data: January 1979–December 1981. The seasonal pattern is based on five years of monthly data: January 1976–December 1978 and January 1978–December 1980.

<sup>2</sup> The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (210 million barrels for motor gasoline).

Source: • Ranges and Seasonal Patterns: 1974–1980, EIA, "Petroleum Statement, Annual (Final Summary);" 1981, EIA, "Petroleum Statement, Monthly."

• Monthly Data: 1981, EIA, "Petroleum Supply Annual;" January–July 1982, EIA, "Petroleum Supply Monthly."

• August 6, 1982–Current Week: Estimates based on EIA weekly data.

**Stocks of Distillate Fuel Oil by District<sup>1</sup>**  
**(Millions of Barrels)**

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
East Coast (PAD 1)	92.1	77.9	67.1	71.4	78.0	85.8	96.0	104.1	108.2	106.5	103.3	90.3
Midwest (PAD 2)	65.5	61.1	57.3	55.7	54.3	56.8	60.2	62.4	62.6	57.4	58.2	58.5
Gulf Coast (PAD 3)	38.7	36.1	36.8	33.5	34.7	38.4	41.2	42.9	45.5	46.1	44.2	39.8
Rocky Mountain (PAD 4)	3.5	3.7	3.9	3.9	3.8	3.5	3.9	3.9	3.6	3.3	3.3	3.4
West Coast (PAD 5)	12.6	12.8	12.8	12.8	12.6	12.1	12.6	13.0	12.4	12.3	13.4	13.1
<b>Total U.S.<sup>2</sup></b>	212.4	191.6	177.8	177.2	183.4	196.5	213.8	226.3	232.4	225.7	222.4	205.1
<b>1981</b>												
East Coast (PAD 1)	71.9	69.8	64.7	64.4	68.2	73.8	81.3	86.3	92.0	94.8	96.0	87.4
Midwest (PAD 2)	57.7	56.1	52.5	52.4	50.5	48.7	49.8	54.1	54.3	51.0	51.6	50.0
Gulf Coast (PAD 3)	34.0	32.3	32.4	34.7	39.2	42.9	40.7	44.5	44.8	39.8	36.7	35.5
Rocky Mountain (PAD 4)	3.4	3.3	3.3	2.9	3.2	3.4	3.7	3.8	3.6	3.3	3.6	3.9
West Coast (PAD 5)	12.4	11.1	11.4	10.3	10.7	11.1	10.8	11.4	12.5	12.3	12.3	14.7
<b>Total U.S.<sup>2</sup></b>	179.4	172.5	164.3	164.6	171.8	179.9	186.3	200.2	207.3	201.2	200.1	191.5
<b>1982</b>												
East Coast (PAD 1)	69.2	58.4	44.9	35.1	39.2	44.2	57.4					
Midwest (PAD 2)	47.4	43.8	40.2	31.2	31.2	34.1	42.6					
Gulf Coast (PAD 3)	30.8	26.7	27.5	28.2	31.0	32.5	34.2					
Rocky Mountain (PAD 4)	4.1	3.9	3.7	3.1	2.8	3.0	3.4					
West Coast (PAD 5)	14.5	13.9	11.4	11.1	10.3	10.7	10.6					
<b>Total U.S.<sup>2</sup></b>	166.0	146.7	127.7	108.8	114.5	124.5	148.1					
<b>Week Ending:</b>												
<b>1982</b>	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	
East Coast (PAD 1)	57.2	58.6	59.4	61.1	61.8	63.6	62.9	64.8	63.7	R67.0	68.0	
Midwest (PAD 2)	42.4	42.9	43.3	44.8	46.3	46.5	45.6	46.2	44.6	45.1	45.6	
Gulf Coast (PAD 3)	32.8	33.6	33.6	35.7	35.3	35.4	36.3	35.0	33.4	R33.4	34.4	
Rocky Mountain (PAD 4)	3.3	3.4	3.2	3.3	3.4	3.5	3.4	3.4	3.4	R3.3	4.4	
West Coast (PAD 5)	9.5	9.2	9.9	9.8	9.4	10.2	9.8	9.3	9.3	R9.4	9.0	
<b>Total U.S.<sup>2</sup></b>	145.2	147.8	149.4	154.6	156.2	159.2	158.0	158.7	154.5	R158.2	161.3	

R=EIA revision.

1 Districts are Petroleum Administration for Defense (PAD) Districts.

2 PAD district data may not add to total due to independent rounding.

Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary)."

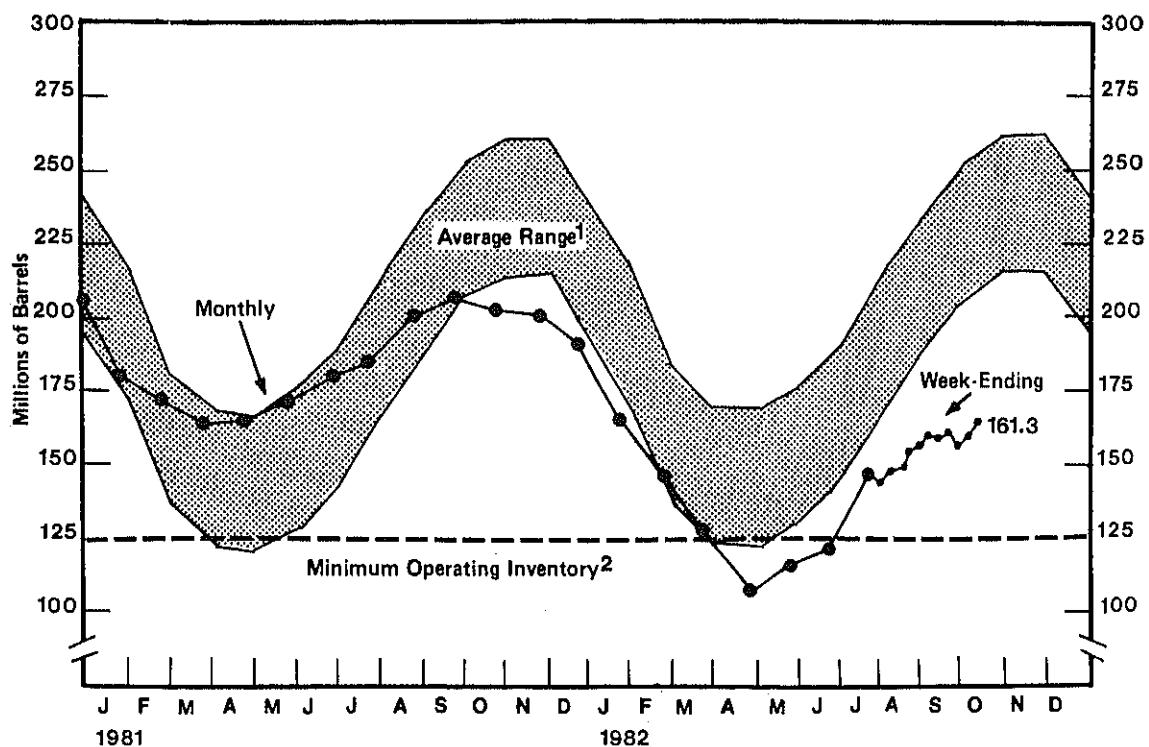
• 1980 Regional Data: Unpublished data based on "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

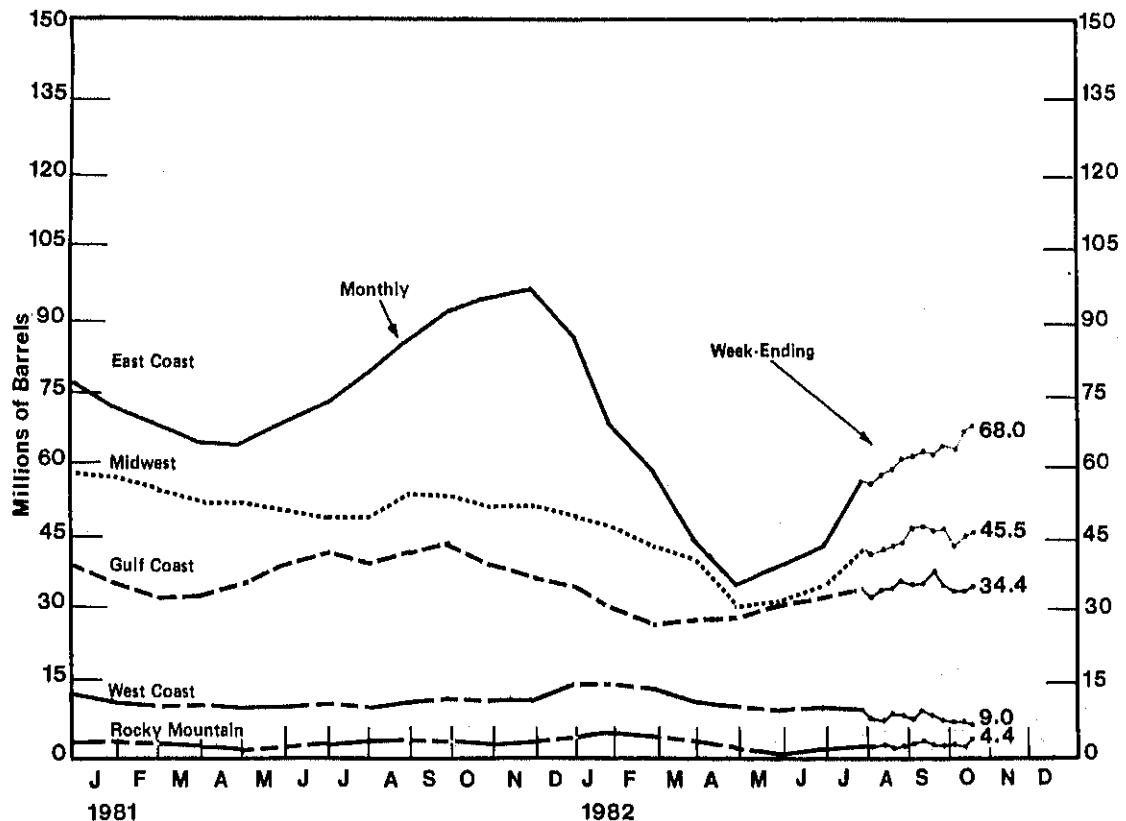
• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982—Current Week: Estimates based on EIA weekly data.

Stocks of Distillate Fuel Oil, U.S. Total  
(Millions of Barrels)



Stocks of Distillate Fuel Oil by District  
(Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data: January 1979–December 1981. The seasonal pattern is based on seven years of monthly data: January 1974–December 1980.

<sup>2</sup> The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (125 million barrels for distillate fuel oil).

Sources: • Ranges and Seasonal Patterns: 1976–1980, EIA, "Petroleum Statement, Annual (Final Summary); 1981, EIA, "Petroleum Statement, Monthly."

• Monthly Data: 1981, EIA, "Petroleum Supply Annual;" January–July 1982, EIA, "Petroleum Supply Monthly."

• August 6, 1982—Current Week: Estimates based on EIA weekly data.

**Stocks of Residual Fuel Oil by District<sup>1</sup>  
(Millions of Barrels)**

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
East Coast (PAD 1)	49.0	42.6	43.0	43.8	43.4	45.1	44.0	43.6	43.8	45.9	46.5	45.4
Midwest (PAD 2)	12.7	12.5	12.0	10.7	10.8	10.9	9.8	9.3	8.9	9.0	8.6	9.1
Gulf Coast (PAD 3)	22.1	22.7	19.5	17.3	20.1	18.9	19.4	21.0	22.3	23.0	25.2	23.8
Rocky Mountain (PAD 4)	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.8
West Coast (PAD 5)	12.4	12.1	12.8	12.5	12.6	12.0	11.6	12.0	12.0	12.3	12.1	12.6
<b>Total U.S.<sup>2</sup></b>	<b>97.2</b>	<b>91.0</b>	<b>88.3</b>	<b>85.3</b>	<b>87.7</b>	<b>87.8</b>	<b>85.6</b>	<b>86.9</b>	<b>87.9</b>	<b>91.0</b>	<b>93.2</b>	<b>91.8</b>
<b>1981</b>												
East Coast (PAD 1)	39.0	38.5	37.3	36.3	38.2	33.6	33.0	34.4	40.0	40.4	43.0	40.1
Midwest (PAD 2)	9.2	9.0	7.9	7.3	7.1	7.0	7.7	8.1	8.5	8.0	8.2	8.3
Gulf Coast (PAD 3)	21.8	19.7	19.4	19.1	21.7	17.0	17.4	21.2	20.4	20.4	19.7	18.7
Rocky Mountain (PAD 4)	0.8	0.7	0.6	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7
West Coast (PAD 5)	11.4	10.1	9.7	9.7	10.5	11.2	10.7	10.7	10.7	10.4	9.8	10.2
<b>Total U.S.<sup>2</sup></b>	<b>82.1</b>	<b>77.9</b>	<b>74.8</b>	<b>72.9</b>	<b>78.1</b>	<b>69.4</b>	<b>69.3</b>	<b>74.9</b>	<b>80.2</b>	<b>79.9</b>	<b>81.4</b>	<b>78.0</b>
<b>1982</b>												
East Coast (PAD 1)	32.2	24.9	24.8	23.5	28.3	28.2	27.1					
Midwest (PAD 2)	7.7	7.3	7.0	6.2	6.0	5.7	5.7					
Gulf Coast (PAD 3)	17.4	14.4	14.7	13.5	14.9	17.1	16.4					
Rocky Mountain (PAD 4)	0.6	0.7	0.6	0.5	0.5	0.5	0.5					
West Coast (PAD 5)	10.2	11.0	10.3	9.9	9.4	9.2	9.3					
<b>Total U.S.<sup>2</sup></b>	<b>68.2</b>	<b>58.1</b>	<b>57.3</b>	<b>53.6</b>	<b>59.1</b>	<b>60.5</b>	<b>59.0</b>					
<b>Week Ending:</b>												
<b>1982</b>	<b>8/6</b>	<b>8/13</b>	<b>8/20</b>	<b>8/27</b>	<b>9/3</b>	<b>9/10</b>	<b>9/17</b>	<b>9/24</b>	<b>10/1</b>	<b>10/8</b>	<b>10/15</b>	
East Coast (PAD 1)	25.2	25.3	23.7	22.4	23.5	24.3	26.1	26.8	29.5	R28.9	28.0	
Midwest (PAD 2)	5.8	5.4	5.3	5.2	5.3	5.4	5.2	5.4	5.6	R5.1	5.1	
Gulf Coast (PAD 3)	15.0	14.5	13.6	13.1	14.5	15.9	16.0	16.3	15.7	R16.5	15.9	
Rocky Mountain (PAD 4)	0.7	0.7	0.6	0.7	0.5	0.4	0.5	0.5	0.6	0.6	0.6	
West Coast (PAD 5)	8.2	7.7	8.0	7.2	7.8	8.0	8.0	8.8	9.5	9.2	9.0	
<b>Total U.S.<sup>2</sup></b>	<b>54.9</b>	<b>53.4</b>	<b>51.2</b>	<b>48.5</b>	<b>51.5</b>	<b>54.0</b>	<b>55.8</b>	<b>57.8</b>	<b>60.8</b>	<b>R60.4</b>	<b>58.6</b>	

R=EIA revision.

1 Districts are Petroleum Administration for Defense (PAD) Districts.

2 PAD district data may not add to total due to independent rounding.

Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary)."

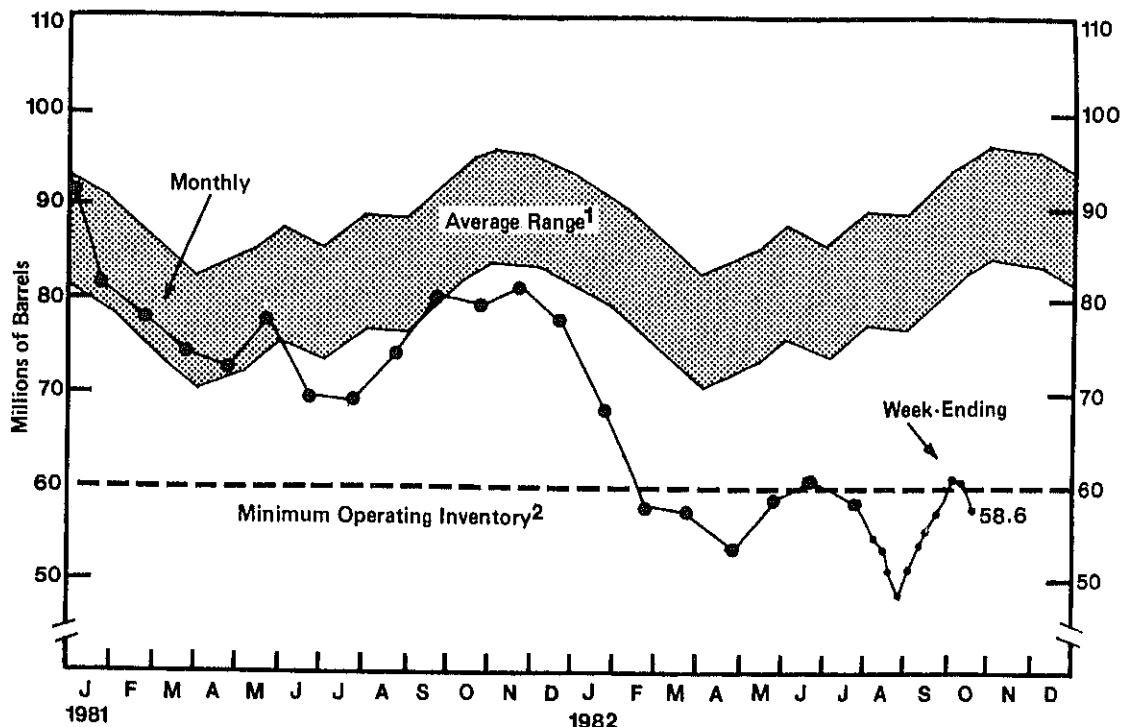
• 1980 Regional Data: Unpublished data based on "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

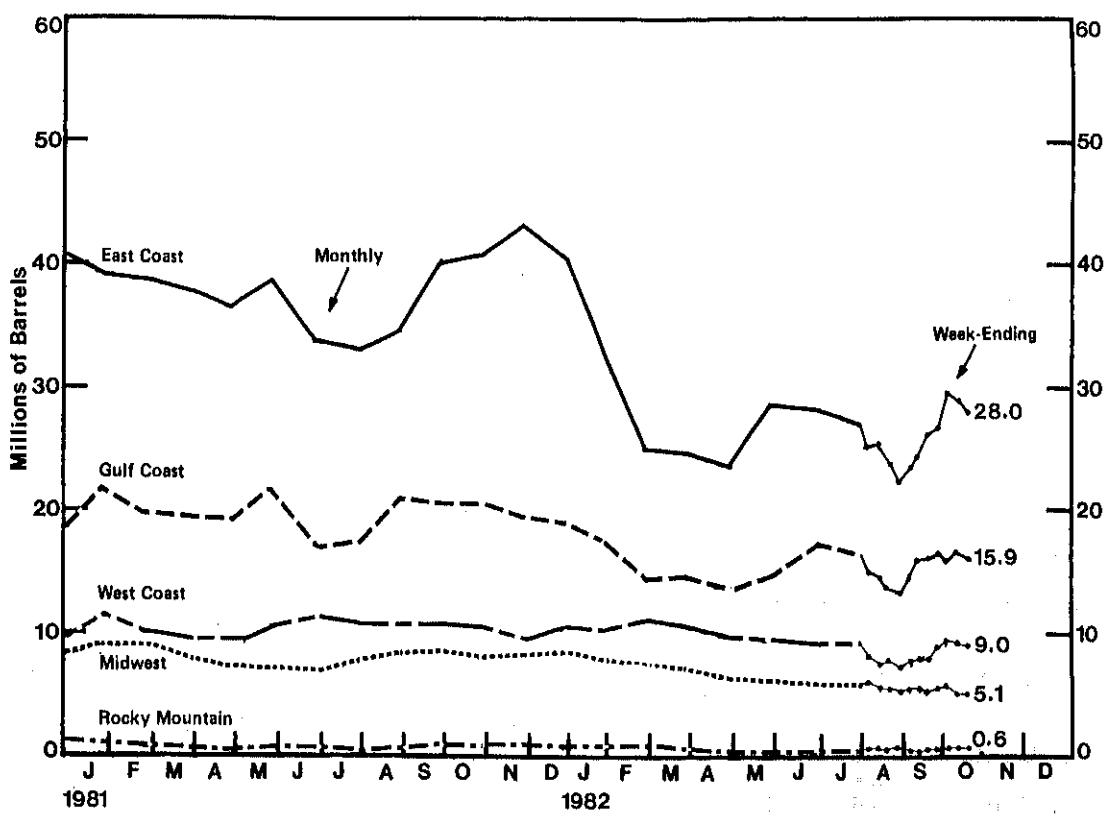
• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982-Current Week: Estimates based on EIA weekly data.

Stocks of Residual Fuel Oil, U.S. Total  
(Millions of Barrels)



Stocks of Residual Fuel Oil by District  
(Millions of Barrels)



1 Average level and width of average range on three years of monthly data: January 1979–December 1981. The seasonal pattern is based on seven years of monthly data: January 1974–December 1980.

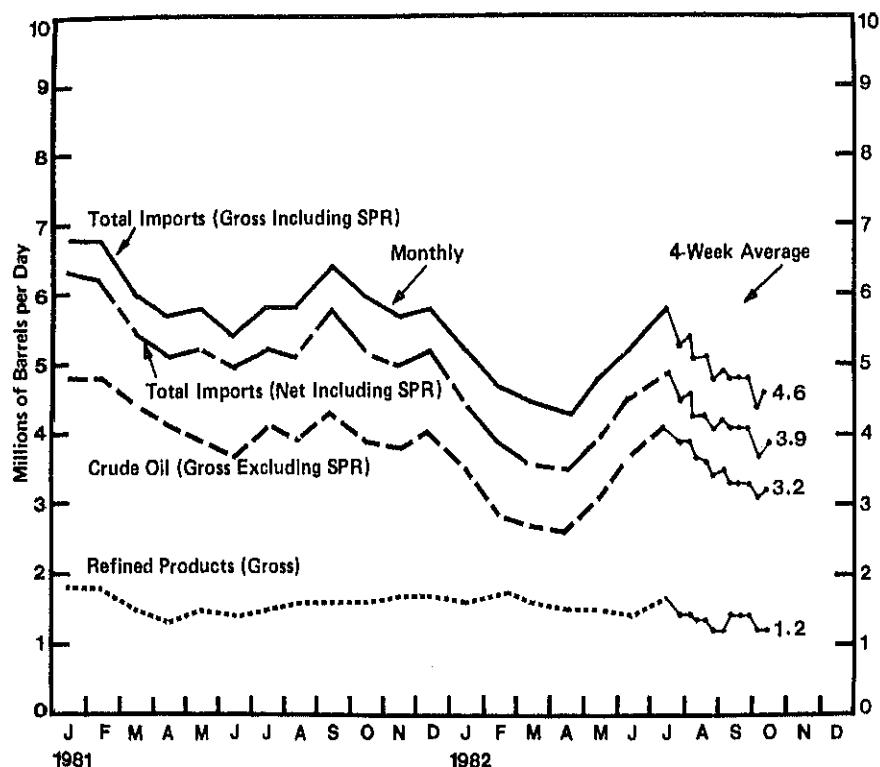
2 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (60 million barrels for residual fuel oil).

Source: • Ranges and Seasonal Patterns: 1975–1980, EIA, "Petroleum Statement Annual (Final Summary); 1981, EIA, "Petroleum Statement, Monthly."

• Monthly Data: 1981 EIA, "Petroleum Supply Annual;" January–July 1982, EIA, "Petroleum Supply Monthly."

• August 6, 1982–Current Week: Estimates based on EIA weekly data.

Imports of Crude Oil and Petroleum Products  
(Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Crude Oil (Excl. SPR)	6.4	6.0	5.7	5.6	5.1	5.5	4.8	4.8	4.7	4.6	4.5	4.9
SPR	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.2
Refined Products	2.2	1.9	1.8	1.5	1.5	1.4	1.4	1.4	1.5	1.6	1.7	1.8
Total (Gross Incl. SPR)	8.6	7.9	7.5	7.1	6.6	6.9	6.3	6.2	6.2	6.4	6.4	6.9
Total Exports <sup>1</sup>	0.5	0.6	0.6	0.4	0.6	0.7	0.5	0.3	0.6	0.6	0.5	0.6
Total (Net Incl. SPR)	8.0	7.4	6.9	6.7	6.0	6.2	5.7	5.9	5.7	5.8	5.9	6.3
<b>1981</b>												
Crude Oil (Excl. SPR)	4.8	4.8	4.4	4.1	3.9	3.7	4.1	3.9	4.3	3.9	3.8	4.0
SPR	0.1	0.1	0.1	0.3	0.4	0.3	0.2	0.3	0.4	0.5	0.3	0.2
Refined Products	1.9	1.9	1.5	1.3	1.5	1.4	1.5	1.6	1.6	1.6	1.7	1.7
Total (Gross Incl. SPR)	6.8	6.8	6.0	5.7	5.8	5.4	5.8	5.8	6.4	6.0	5.7	5.8
Total Exports <sup>1</sup>	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.5	0.7	0.7	0.7
Total (Net Incl. SPR)	6.3	6.2	5.4	5.1	5.2	5.0	5.2	5.1	5.8	5.2	5.0	5.2
<b>1982</b>												
Crude Oil (Excl. SPR)	3.5	2.8	2.7	2.6	3.1	3.7	4.1					
SPR	0.2	0.2	0.2	0.2	0.2	0.1	0.1					
Refined Products	1.6	1.7	1.6	1.5	1.5	1.4	1.5					
Total (Gross Incl. SPR)	5.2	4.7	4.5	4.3	4.8	5.2	5.8					
Total Exports <sup>1</sup>	0.8	0.8	0.9	0.8	0.8	0.7	0.7					
Total (Net Incl. SPR)	4.4	3.9	3.6	3.5	4.0	4.5	5.0					
<b>Average for Four-Week Period Ending:</b>												
<b>1982</b>	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	
Crude Oil (Excl. SPR)	3.9	3.9	3.7	3.6	3.4	3.5	3.3	3.3	3.3	R3.1	3.2	
SPR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	
Refined Products	1.4	1.4	1.3	1.3	1.2	1.2	1.4	1.4	1.4	1.2	1.2	
Total (Gross Incl. SPR)	5.3	5.4	5.1	5.1	4.8	4.9	4.8	4.8	4.8	4.4	4.6	
Total Exports <sup>1</sup>	E0.8	E0.8	E0.8	E0.8	E0.8	E0.7	E0.7	E0.7	E0.7	E0.7	E0.7	
Total (Net Incl. SPR)	4.5	4.6	4.3	4.3	4.1	4.2	4.1	4.1	4.1	R3.7	3.9	

<sup>1</sup>Re-EIA revision. <sup>a</sup>Includes exports of crude oil and refined petroleum products. Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

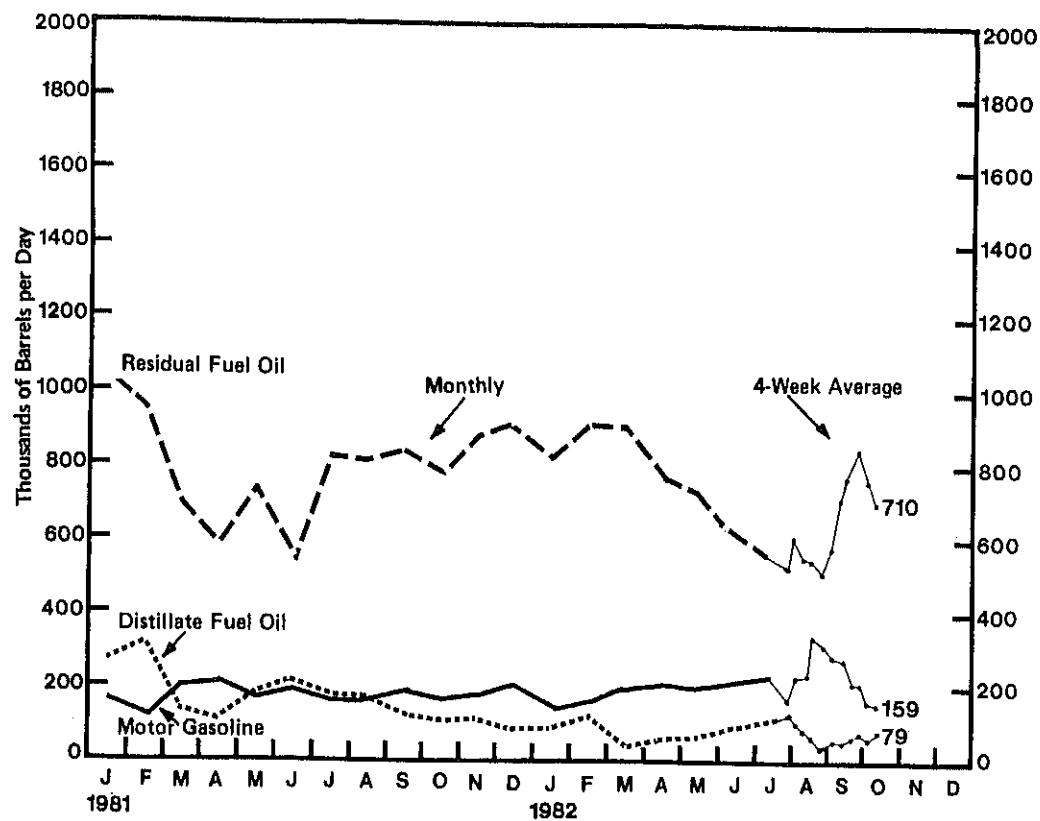
• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982—Current Week: Four-week averages based on EIA weekly data.

Note: Detail data may not add to total due to independent rounding.

**Gross Imports of Petroleum Products by Product  
(Thousands of Barrels per Day)**



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Motor Gasoline <sup>1</sup>	141	154	155	155	132	148	149	141	106	152	126	121
Jet Fuel	96	43	100	110	73	86	93	67	77	86	63	60
Distillate Fuel Oil	179	237	193	154	126	108	117	77	101	115	133	166
Residual Fuel Oil	1,338	1,122	976	775	812	749	787	875	906	875	1,024	1,026
Other <sup>2</sup>	437	376	333	315	330	323	267	230	343	384	380	438
<b>1981</b>												
Motor Gasoline <sup>1</sup>	158	121	200	209	177	197	169	167				
Jet Fuel	15	38	76	55	47	68	35	47				
Distillate Fuel Oil	273	325	147	116	179	225	179	174				
Residual Fuel Oil	1,015	954	699	584	741	540	830	810				
Other <sup>2</sup>	434	462	385	366	345	344	300					
<b>1982</b>												
Motor Gasoline <sup>1</sup>	158	165	202	208	199	218						
Jet Fuel	10	62	39	47	31	3	1b					
Distillate Fuel Oil	96	130	48	59	74	100	124					
Residual Fuel Oil	821	928	910	762	738	643	576					
Other <sup>2</sup>	500	456	405	397	429	480						
<b>Average for Four-Week Period Ending:</b>												
1982	8/6	8/13	8/20	8/27	9/3							
Motor Gasoline <sup>1</sup>	171	233	245	343	323							
Jet Fuel	14	13	24	32	43							
Distillate Fuel Oil	129	101	89	74	45							
Residual Fuel Oil	527	599	564	563	517							
Other <sup>2</sup>	535	455	349	265	285							

<sup>1</sup>=EIA revision.

Includes imports of finished motor gasoline and imports of motor gasoline blending components.

Includes imports of kerosene, unfinished oils and other oils.

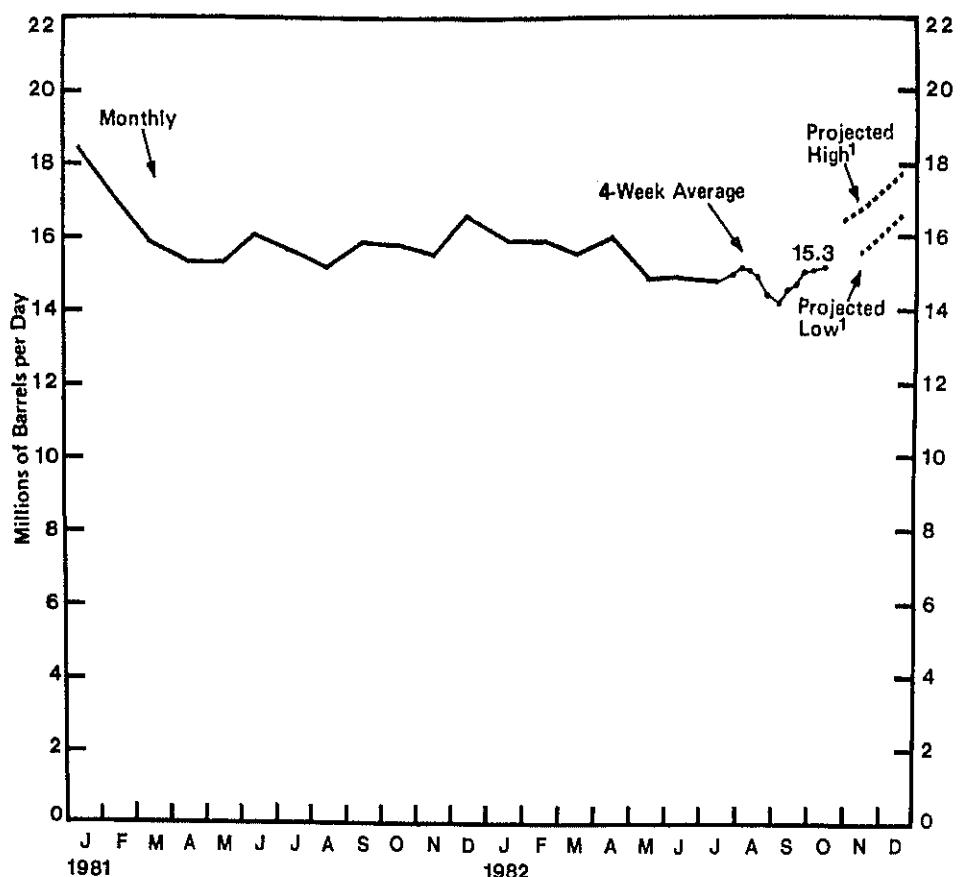
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982-Current Week: Four-week averages based on EIA weekly data.

Total Petroleum Products Supplied for Domestic Use  
(Millions of Barrels per Day)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	18.9	18.8	17.4	16.8	16.2	16.2	16.0	15.8	16.6	17.0	16.7	18.4
1981	18.4	17.0	15.9	15.4	15.4	16.1	15.7	15.3	15.9	15.8	15.6	16.6
1982	15.9	15.9	15.6	16.0	14.8	14.9	14.8					
<b>Average for Four-Week Period Ending:</b>												
1982	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	
	15.0	15.2	15.1	14.9	14.4	14.2	14.5	14.8	15.1	R15.2	15.3	

R=EIA revision.

1 Projected. See Appendix C for explanation of derivation of values.

Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

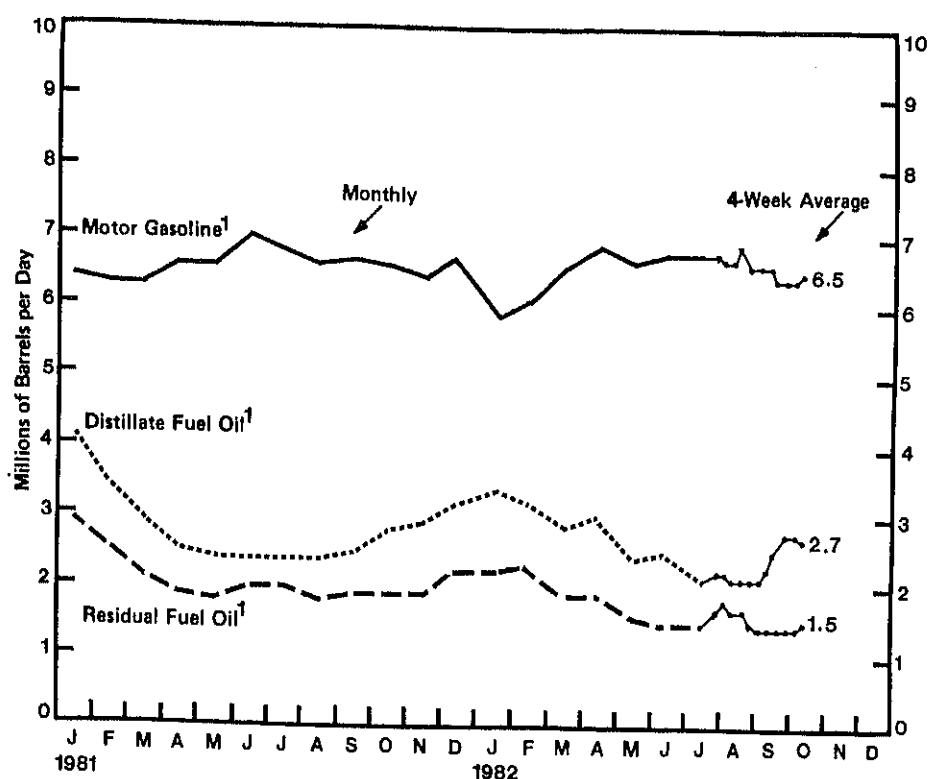
• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982—Current Week: Four-week averages based on EIA weekly data.

• Projections: EIA, Office of Energy Markets and End Use (May 1982).

Petroleum Products Supplied by Product  
(Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Motor Gasoline	6.3	6.6	6.4	6.8	6.7	6.7	6.7	6.6	6.5	6.7	6.2	6.6
Jet Fuel	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.0	1.0	1.1
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel Oil	3.7	3.7	3.2	2.6	2.4	2.3	2.2	2.1	2.1	2.6	2.9	2.9
Residual Fuel Oil	3.1	3.1	2.7	2.4	2.2	2.3	2.3	2.3	2.4	2.2	2.5	3.6
Other	4.4	4.1	3.8	3.7	3.8	3.7	3.6	3.5	4.0	4.0	3.9	4.2
<b>1981</b>												
Motor Gasoline <sup>1</sup>	6.4	6.3	6.3	6.6	6.6	7.0	6.8	6.6	6.7	6.6	6.4	6.7
Jet Fuel	1.1	1.0	1.1	1.0	0.9	1.0	1.1	1.0	1.0	0.9	1.0	1.0
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel Oil <sup>1</sup>	4.1	3.4	2.9	2.5	2.4	2.4	2.4	2.4	2.5	2.8	2.9	3.2
Residual Fuel Oil <sup>1</sup>	2.9	2.5	2.1	1.9	1.8	2.0	2.0	1.8	1.9	1.9	1.9	2.2
Other	3.7	3.6	3.4	3.3	3.5	3.4	3.3	3.3	3.5	3.5	3.3	3.3
<b>1982</b>												
Motor Gasoline <sup>1</sup>	5.9	6.1	6.6	6.9	6.7	6.8	6.8					
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1.0	1.0					
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1					
Distillate Fuel Oil <sup>1</sup>	3.4	3.2	2.9	3.0	2.4	2.5	2.1					
Residual Fuel Oil <sup>1</sup>	2.2	2.3	1.9	1.9	1.6	1.5	1.5					
Other	3.2	3.2	3.1	3.2	3.1	3.1	3.3					
<b>Average for Four-Week Period Ending:</b>												
<b>1982</b>	<b>8/6</b>	<b>8/13</b>	<b>8/20</b>	<b>8/27</b>	<b>9/3</b>	<b>9/10</b>	<b>9/17</b>	<b>9/24</b>	<b>10/1</b>	<b>10/8</b>	<b>10/15</b>	
Motor Gasoline <sup>1</sup>	6.8	6.7	6.7	6.9	6.6	6.6	6.6	6.4	6.4	6.4	6.5	
Jet Fuel	1.0	1.0	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	
Kerosene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Distillate Fuel Oil <sup>1</sup>	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.5	2.8	2.8	2.7	
Residual Fuel Oil <sup>1</sup>	1.7	1.8	1.7	1.7	1.5	1.4	1.4	1.4	1.4	R1.4	1.5	
Other	3.2	3.4	3.4	3.1	3.1	2.9	3.0	3.3	3.3	3.5	3.6	

R=EIA revision.

<sup>1</sup> Products supplied statistics for 1981 and 1982 should not be compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

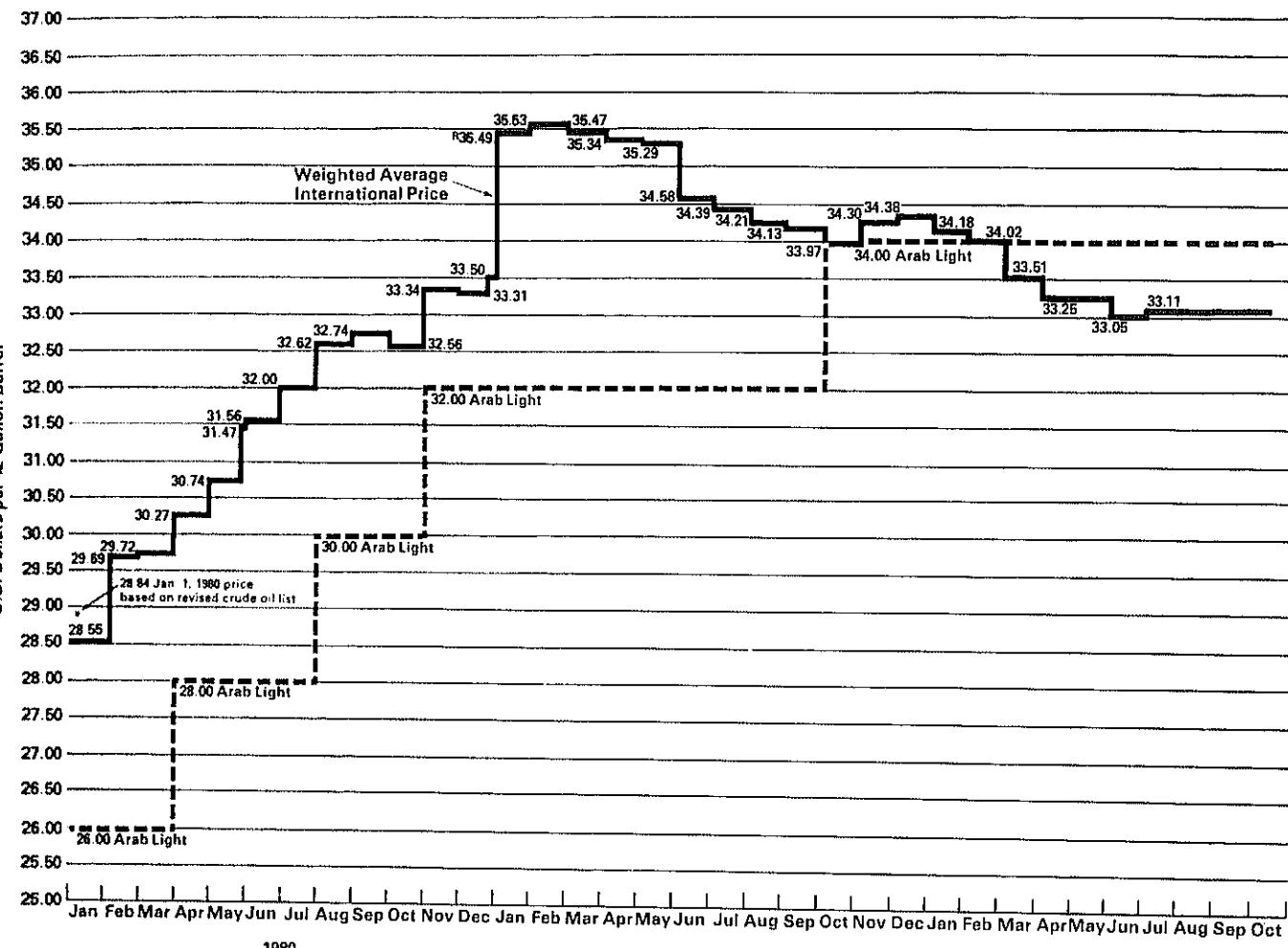
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January-July 1982: EIA, "Petroleum Supply Monthly."

• August 6, 1982-Current Week: Four-week averages based on EIA weekly data.

World Crude Oil Prices<sup>1</sup>  
(Dollars per Barrel)



<sup>1</sup> Internationally traded oil only. Average price (FOB) weighted by estimated export volume.

Note: Beginning with the May 1, 1981 issue of the Weekly Petroleum Status Report, the world crude oil price is based on a revised crude oil list. Additions: Saudi Arabia's Arabian Heavy, Dubai's Fateh, Egypt's Suez Blend, and Mexico's Maya. Omissions: Canadian Heavy. Replacements: Iraq's Kirkuk Blend for Iraq's Basrah Light.

The above graph shows an estimated world crude oil price based on this revised list beginning January 1, 1981. An asterisk shows the January 1, 1980 price based on the revised list. All other 1980 prices represent the old crude oil list before revisions.

## World Crude Oil Prices<sup>1</sup> (Dollars per Barrel)

Country	Type of Crude/ API Gravity	Current Price	Percent Change Current Price From					
			In Effect 1 Jan 82	In Effect 1 Jan 81	In Effect 1 Jan 80	In Effect 31 Dec 78	In Effect 1 Jan 80	In Effect 31 Dec 78
<b>OPEC</b>								
Saudi Arabia	Arabian Light 34° (Benchmark crude)	34.00	34.00	32.00	26.00	12.70	30.8	167.7
	Saudi Berri 39°	34.52	35.40	33.52	27.52	13.23	25.4	160.9
Abu Dhabi	Arabian Heavy 28°	31.00	31.00	31.00	26.00	12.02	24.0	157.9
Dubai	Murban 39°	34.56	35.50	36.66	29.56	13.26	16.9	160.6
Qatar	Fateh 32°	33.86	33.86	35.93	27.93	12.64	21.2	167.9
Iran	Dukhan 40°	34.49	35.45	37.42	29.42	13.19	17.2	161.5
Iraq	Iranian Light 34°	31.20	34.20	37.00	230.00	13.46	4.0	132.0
Kuwait	Kirkuk 36°	34.83	34.83	37.50	29.29	13.17	18.9	164.5
Neutral Zone	Kuwait Blend 31°	32.30	32.30	35.50	27.50	12.22	17.6	164.3
Algeria	Khafji 28°	31.03	31.03	35.20	27.20	12.03	14.1	157.9
Nigeria	Saharan 44°	35.50	37.00	40.00	33.00	14.10	7.6	151.8
Libya	Bonny Light 37°	35.50	36.50	40.00	29.97	16.12	18.5	134.8
Indonesia	Es Sider 37°	35.10	36.50	40.78	34.50	13.68	1.7	156.6
Venezuela	Minas 34°	35.00	35.00	35.00	27.50	13.55	27.3	158.3
Gabon	Tia Juana 26°	32.88	32.88	32.88	26.20	12.72	30.5	158.5
Ecuador	Mandji 28.6°	34.00	34.00	35.00	28.00	12.59	21.4	170.1
	Oriente 30°	32.50	34.25	40.06	33.50	12.35	-3.0	163.2
<b>Total OPEC<sup>3</sup></b>	NA	33.56	34.13	34.82	28.30	13.03	18.6	157.6
<b>Non-OPEC</b>								
United Kingdom	Forties 36.5°	33.50	36.50	39.25	29.75	14.00	12.6	139.3
Norway	Ekoifisk 42°	34.25	37.25	40.00	32.50	14.20	5.4	141.2
Mexico	Mexican Light 32°	32.50	35.00	38.50	32.00	13.10	1.6	148.1
"	Mexican Heavy 22°	25.00	26.50	34.50	28.00	NA	-10.7	NA
Egypt	Suez Blend 33°	32.80	34.00	40.50	34.00	12.81	-4.1	154.5
Oman	Oman 36°	34.00	35.00	37.50	30.26	13.06	12.4	160.3
Syria	Suwadiyah 26°	30.00	30.00	36.03	31.39	11.64	-4.4	157.7
Malaysia	Miri 38°	35.60	36.60	41.30	33.60	14.30	8.0	149.0
Brunel	Serla 36.5°	35.10	36.10	40.35	33.40	14.16	5.1	148.1
U.S.S.R. <sup>5</sup>	Export Blend 33°	31.20	35.49	39.25	33.20	13.20	-6.0	136.4
<b>Total Non-OPEC<sup>3</sup></b>	NA	31.91	34.35	38.54	31.94	13.44	0	137.4
<b>Total World<sup>3</sup></b>	NA	33.11	34.18	35.49	28.84	13.08	14.8	153.1
<b>United States<sup>6</sup></b>	NA	32.99	34.15	36.69	29.35	13.38	12.4	146.6

NA=Not Applicable.

1 Official sales prices or estimated term contract prices; spot prices excluded.

2 37c higher at 60 days' credit.

3 Average prices (FOB) weighted by estimated export volume.

4 On 60 days' credit.

5 Average delivered cost to Northwest Europe.

6 Average prices (FOB) weighted by estimated import volume.

Source: • DOE, Office of International Affairs, October 20, 1982.

• Platt's Oilgram Price Report.

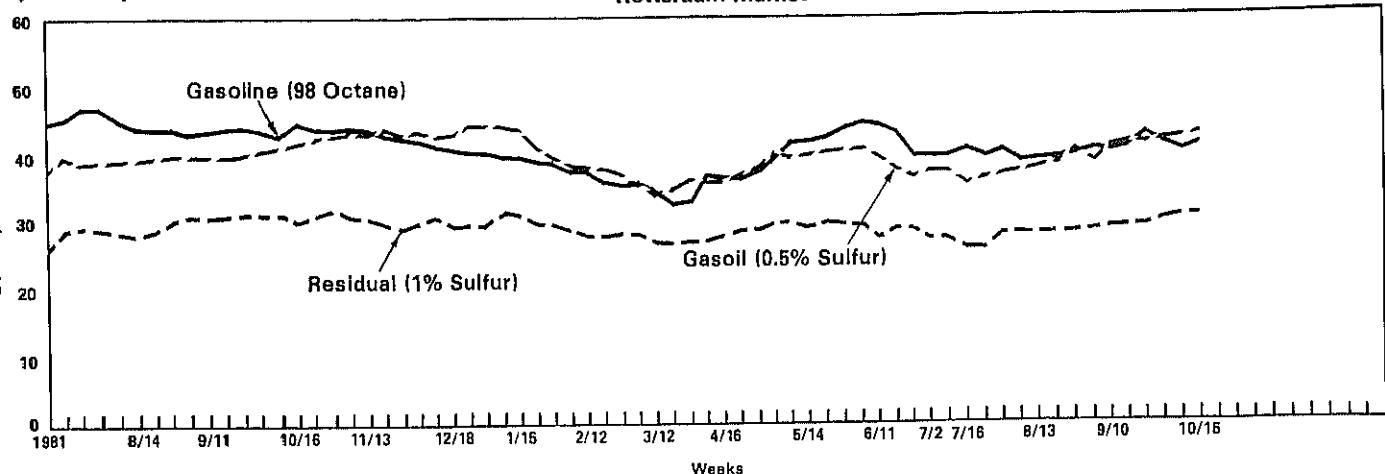
• Petroleum Intelligence Weekly.

• Oil Buyers' Guide.

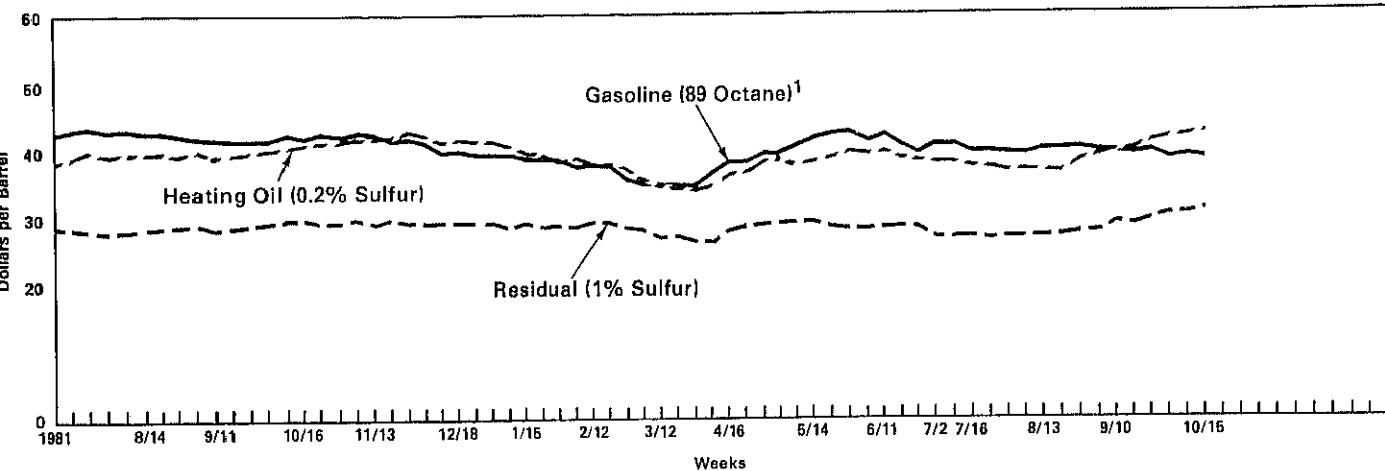
• Europe Oil Prices.

Spot Market Product Prices  
(Dollars per Barrel)

Rotterdam Market



New York Market



<sup>1</sup> The prices shown through September 25, 1981 are for 94 octane gasoline rather than for 89 octane gasoline.

Source: • Oil Buyers' Guide, Weekly Oil Market Product Report.

• DOE, Office of International Affairs.

spot Market Product Prices  
Dollars per Barrel)

		Motor Gasoline		Gasoil/Heating Oil <sup>1</sup>		Residual Fuel Oil <sup>2</sup>	
		Rotterdam (98 Octane)	N.Y. <sup>3</sup> (89 Octane)	Rotterdam (0.5% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>3</sup> (1% Sulfur)
31	Oct 2	43.73	41.83	40.62	40.00	30.86	29.25
	9	43.14	41.98	41.09	40.64	30.63	29.50
	16	44.67	41.87	42.09	41.03	30.03	29.85
	23	44.37	42.29	42.43	41.06	30.93	29.80
	30	44.26	42.40	42.83	41.48	30.41	29.25
Nov	6	44.20	42.71	43.23	41.69	30.48	29.75
	13	43.32	42.15	43.16	41.90	30.33	29.90
	20	42.79	41.54	43.70	41.90	29.65	29.90
	27	42.73	41.54	43.10	42.59	28.83	29.10
Dec	4	42.15	41.03	43.57	42.10	29.88	29.90
	11	41.03	39.61	42.83	41.16	30.41	29.00
	18	41.03	39.82	43.16	41.48	29.20	29.00
	24	40.50	39.50	44.57	41.48	29.50	29.00
32	Jan 8	39.98	39.67	44.30	40.42	31.68	28.40
	15	38.68	38.72	43.57	39.90	30.78	29.00
	22	38.57	38.93	40.88	39.38	29.50	28.35
	29	38.22	38.30	39.21	38.22	29.73	28.70
Feb	5	37.22	37.67	38.40	38.54	28.68	28.50
	12	37.22	37.61	37.87	37.90	27.93	29.25
	19	35.93	37.61	37.87	37.80	27.93	29.25
	26	35.52	35.72	37.00	37.38	28.08	28.50
Mar	5	35.46	34.88	35.32	35.28	28.08	28.00
	12	34.41	34.57	34.38	33.60	26.95	27.00
	19	32.42	34.55	34.99	34.02	26.50	27.00
	26	32.83	34.52	36.13	34.06	26.65	26.25
Apr	2	36.64	36.54	35.52	34.54	26.80	26.25
	9	36.17	38.01	35.72	36.12	27.78	27.70
	16	36.64	38.22	36.66	36.54	28.53	28.50
	23	37.51	39.69	37.87	38.22	28.75	28.75
	30	39.57	39.40	39.68	38.32	29.43	29.00
May	7	41.68	40.53	38.81	37.80	29.80	29.25
	12	41.85	41.87	39.21	38.32	29.73	29.50
	19	42.67	42.29	40.21	38.85	29.73	28.75
	26	43.79	42.61	40.35	39.69	29.43	28.35
Jun	4	44.37	41.68	40.55	39.48	29.06	28.35
	11	44.08	42.21	39.34	39.90	27.40	28.40
	18	43.08	40.66	37.60	38.64	28.60	28.50
	25	39.57	39.56	36.53	38.33	28.45	28.25
Jul	2	39.86	40.07	37.27	38.01	27.10	27.00
	9	39.86	40.07	37.27	38.01	27.10	27.00
	16	40.04	39.73	35.32	37.59	25.90	27.00
	23	39.57	39.84	36.13	37.38	25.53	26.80
	30	40.12	39.59	36.98	36.96	27.78	27.00
Aug	6	38.80	39.59	37.33	37.06	28.00	27.00
	13	38.45	40.00	37.60	37.80	27.85	27.00
	20	39.15	40.00	38.70	37.80	27.85	27.25
	27	39.86	40.05	40.28	38.32	27.85	27.75
Sep	3	40.56	39.84	38.46	39.48	28.38	28.00
	10	40.39	39.69	41.02	39.58	28.68	29.25
	17	41.03	39.38	41.22	39.90	28.75	28.75
	24	42.61	39.38	41.22	41.26	28.90	29.60
Oct	1	41.03	38.54	41.96	41.58	29.88	30.25
	8	40.15	38.96	42.29	42.00	30.33	30.35
	15	41.03	38.74	42.96	42.42	30.48	31.00

1 Refers to No. 2 Heating Oil.

2 Refers to No. 6 Oil.

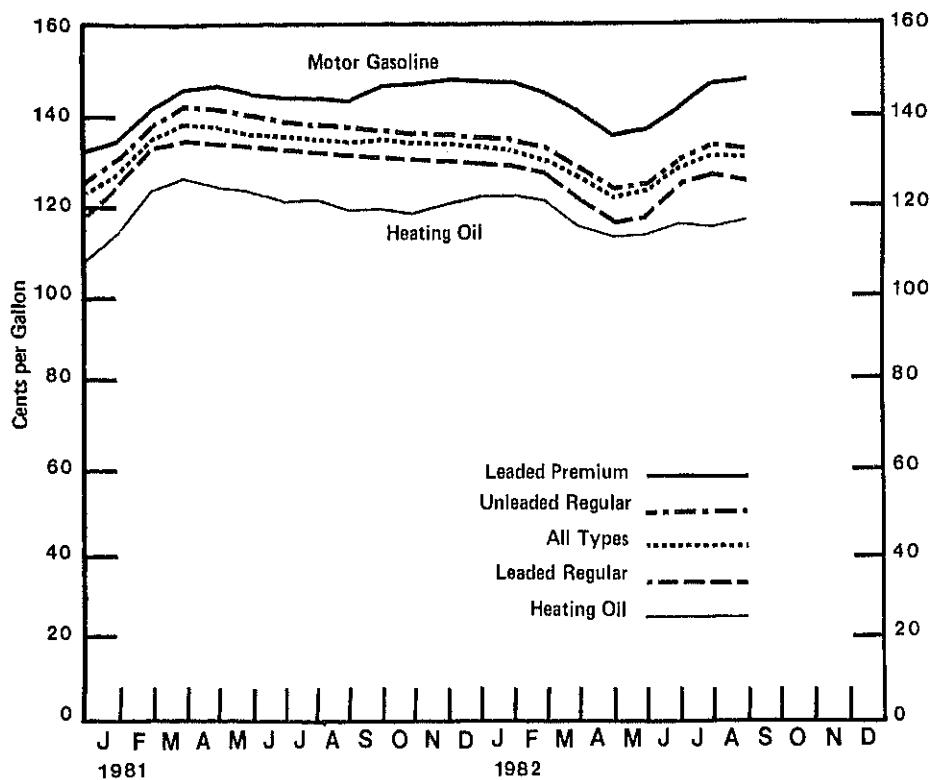
3 East Coast Cargoes.

4 New York Harbor Reseller Barge Prices.

Source: • Oil Buyers' Guide, Weekly Oil Market Product Report.

• DOE, Office of International Affairs.

**Average Retail Selling Prices  
Motor Gasoline and Residential Heating Oil  
(Cents per Gallon, Including Taxes)**



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
<b>Motor Gasoline</b>												
Leaded Premium	114.9	123.2	127.7	129.2	129.5	130.0	130.7	131.0	130.4	130.1	129.9	131.0
Leaded Regular	108.6	115.9	120.2	121.2	121.5	121.7	121.6	121.0	119.7	118.8	118.8	119.7
Unleaded Regular	113.1	120.7	125.2	126.4	126.6	126.9	127.1	126.7	125.7	125.0	126.0	126.8
All-types	111.0	118.6	123.0	124.2	124.4	124.6	124.7	124.3	123.1	122.3	122.2	123.1
Residential Heating Oil	90.8	95.3	97.1	97.4	97.2	97.9	97.9	97.9	98.1	98.7	101.0	106.5
<b>1981</b>												
<b>Motor Gasoline</b>												
Leaded Premium	133.8	141.0	144.9	145.1	144.7	144.6	144.6	144.4	145.6	145.7	146.2	146.0
Leaded Regular	123.8	132.1	135.2	134.4	133.3	132.4	131.5	131.0	130.5	129.9	129.7	129.3
Unleaded Regular	129.8	138.2	141.7	141.2	140.0	139.1	138.2	137.6	137.6	137.1	136.9	136.5
All-types	126.9	135.3	138.8	138.1	137.0	136.2	135.3	134.8	135.8	135.3	135.1	134.8
Residential Heating Oil	114.4	123.4	126.5	123.9	122.7	120.9	121.0	119.4	119.7	118.8	120.8	122.0
<b>1982</b>												
<b>Motor Gasoline</b>												
Leaded Premium	145.6	143.8	140.7	136.8	137.9	140.8	145.0	145.8				
Leaded Regular	128.5	126.0	120.6	114.8	116.6	124.2	126.3	125.4				
Unleaded Regular	136.8	133.4	128.4	122.5	123.7	130.9	133.1	132.3				
All-types	134.1	131.8	126.8	121.0	122.4	129.6	131.8	131.0				
Residential Heating Oil	122.0	120.7	115.3	113.2	114.3	116.2	R115.8	P116.3				

R=EIA revision.

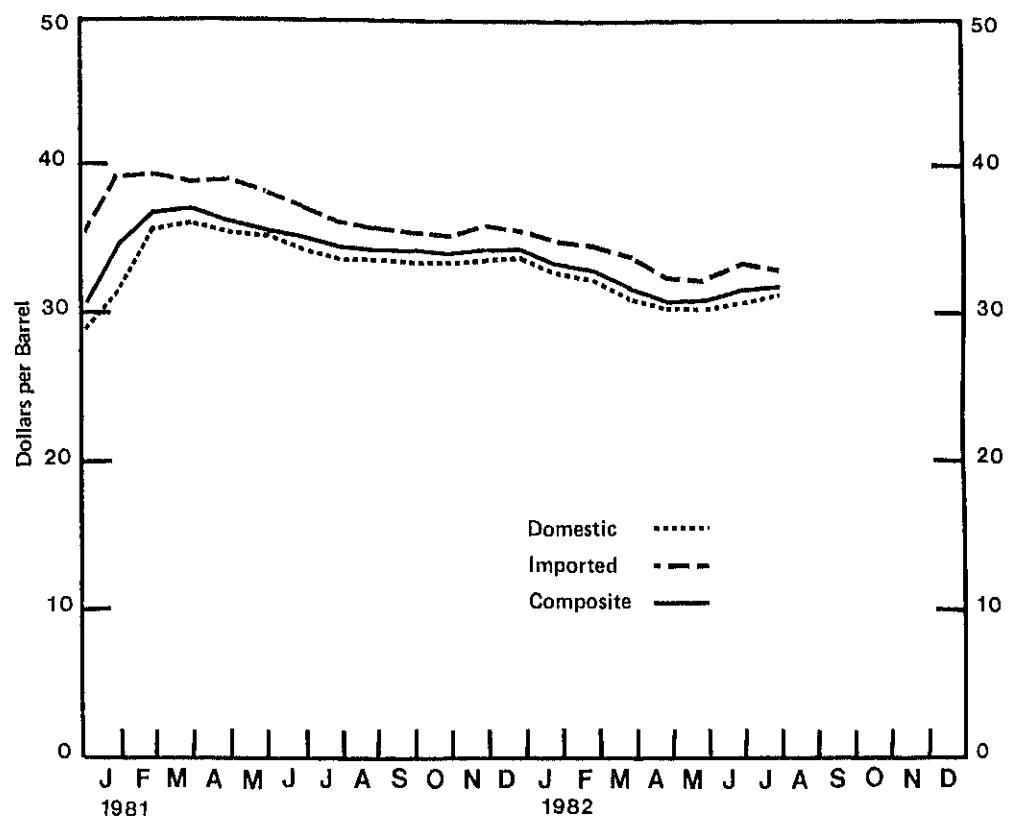
P=Preliminary.

Note: Motor gasoline data include prices from self-service stations. Beginning with September 1981, the Bureau of Labor Statistics has changed the weights used in the calculation of average motor gasoline prices. In the "all types" category gasohol is now included, and unleaded premium is weighted more heavily.

Source: • Motor Gasoline—Bureau of Labor Statistics. See definitions for description of survey.

• Residential Heating Oil—Through October 1980: Form EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report," November 1980 Forward; Form EIA-9A, "No. 2 Distillate Price Monitoring Report."

Refiner Acquisition Cost of Crude Oil  
(Dollars per Barrel)



Year/Type	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
<b>1980</b>												
Domestic	19.78	21.22	22.07	22.89	23.63	24.48	25.05	24.98	25.37	26.21	26.51	28.55
Imported	30.75	32.40	33.42	33.54	34.33	34.48	34.51	34.44	34.46	34.63	35.09	35.63
Composite	24.81	26.11	26.88	27.09	27.85	28.80	28.73	28.70	28.96	29.56	29.79	31.39
<b>1981</b>												
Domestic	32.71	36.27	36.97	35.58	35.21	34.20	33.76	33.79	33.47	33.48	33.49	33.51
Imported	38.85	39.00	38.31	38.41	37.84	37.03	36.58	35.82	35.44	35.43	36.21	35.95
Composite	34.86	37.28	37.48	36.58	36.11	35.03	34.70	34.46	34.11	34.07	34.33	34.33
<b>1982</b>												
Domestic	33.39	32.71	31.08	30.27	30.37	30.79	30.92					
Imported	35.54	35.48	34.07	32.82	32.78	33.79	33.44					
Composite	33.95	33.40	31.81	30.83	31.02	31.74	31.74					

Source: • 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."  
• January 1981 Forward: Form EIA-14, "Refiners Monthly Cost Report."



## Appendix A: EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stocks Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165). The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) and the monthly imports system. In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and District of Columbia. The EIA-161 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline. The EIA-162 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-163 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including Interstate, Intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-164 sample frame consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil. The EIA-165 sample frame includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

	Refiners (Refineries)	Bulk Terminals	Pipelines	Crude Oil Stock Holders	Importers
Weekly Form	EIA-161	EIA-162	EIA-163	EIA-164	EIA-165
Monthly Frame Size	186(347)	173	65	296	955
Weekly Sample Size	84(216)	93	65	111	61

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

### Estimation and Imputation

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data. First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum,  $W_s$ ). Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum,  $M_s$ ). Finally, let  $M_t$  be the sum of the most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for that product for all companies,  $W_t$ , is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly Imports data are highly variable on a company-by-company basis or a week-by-week basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly imports were considered. The average ratio method was selected for estimating imports because it produces estimates that were close to benchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

Since  $M_t$ , the total of the most recent month's data, includes companies which may not have responded weekly, the ratio method of estimation automatically imputes for nonresponse.

### Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 76 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

## Appendix B: Interpretation and Derivation of Average Inventory Levels

The charts displaying inventory levels of total petroleum products (p. 7), crude oil (p. 7), motor gasoline (p. 9), distillate fuel oil (p. 11), and residual fuel oil (p. 13) have been revised. This revision is meant to provide the user with the current data, and a summary of data from the most recent three year period running from January through December or from July through June. This summary takes the form of an "average range." These curves also include seasonal variation determined from a longer time period.

These curves will be updated every six months in March or October by basing the "average ranges" on a more recent time period. At that time, each three year data series will be adjusted by dropping the oldest six months and including the most recent six months.

For each data series, the monthly seasonal factors were estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors were assumed to be stable (i.e. unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for total petroleum (crude and products), distillate fuel oil, and residual fuel oil were derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors were based on monthly data from 1975, 1976, 1978, 1979, and 1980. In 1977 there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1974 appeared to be different from those in recent years. It was assumed that the seasonal patterns in 1974 and 1977 were not representative of the recent past. Therefore, these years were not used in the determination of seasonal patterns for motor gasoline stocks.

Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for total petroleum (crude and products), crude oil, distillate fuel oil, and residual fuel oil is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent three-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points as described below. The width of the "average range" is twice this standard error.

The upper curve of the "average range" is defined as the average plus the standard error plus the seasonal factors. The lower curve is defined as the average minus the standard error plus the seasonal factors.

The flat curves labeled "minimum operating inventory" for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil, were derived by the National Petroleum Council and were published in "Petroleum Storage and Transportation Capacities" in December 1979. In that document, minimum operating inventory is described as follows:

Inventory below this level is not available for consumer use because it is required to fill pipelines, tank bottoms and refinery process equipment; facilitate blending to meet product specifications; prepare for planned maintenance periods; handle unavoidable but anticipated emergencies; and sustain uninterrupted operations. Runouts and shortages would begin to occur if inventory were to fall below this level.

The flat curve labeled "observed minimum" for total petroleum stocks is based on the lowest inventory level observed during the three-year base period. The National Petroleum Council did not derive a minimum operating inventory level for total petroleum stocks.

For crude oil, motor gasoline, distillate fuel oil, and residual fuel oil, the observed minimum and the minimum operating inventory are quite close. Hence, it is thought that the observed minimum is a reasonable proxy for the minimum operating inventory.

## Appendix C: Projection of Products Supplied from the Short Term Energy Outlook

The projections of "high" and "low" total petroleum demand, shown in the WPSR as products supplied, are from the EIA Office of Energy Markets and End Use, May 1982 Short-Term Energy Outlook (Outlook).

Three distinctive forecast cases are presented in the May 1982 Outlook based on differing assumptions about the world price of crude oil. In case 1, it is assumed that world crude oil prices fall to an effective OPEC market price of \$28 per barrel by the end of 1982. In case 2, imported crude oil prices are stable at April levels through 1982. In case 3, crude oil prices rise at two times the U.S. rate of inflation. Macroeconomic inputs are based on a forecast from Data Resources, Inc. (DRI CONTROL 042782).

The "high demand" case is formed by adding the case 1 (low price) forecast of total demand to the square root of the sum of the squared increases in demand resulting from the following changes in key variables: (1) a 5 percent increase in heating degree-days over the base case, (2) an 8 percent increase in cooling degree-days over the base case, (3) a 0.8 percent increase in income over the base case, and (4) an 11 percent decrease in new car efficiency from the base case. The "low demand" case is formed by subtracting from the case 3 (high price) forecast the square root of the sum of the squared decreases in demand resulting from decreases from the base case for heating degree-days, cooling degree-days, and income; and a 12 percent increase over the base case in new car efficiency.

For detailed information on the assumptions used in the forecast methodologies, please refer to the published report, Short-Term Energy Outlook, May 1982.

Copies of the report are available from:

National Energy Information Center  
Room 1F-048, Forrestal Building  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
Telephone: (202) 252-8800

## Appendix D: Changes in Reporting of Monthly Data—January 1981

In January 1981, new forms were introduced for the collection of monthly data in the Joint Petroleum Reporting System. At that time, several major changes were made in the reporting of motor gasoline, distillate fuel oil, and residual fuel oil. The reporting changes were made to describe industry operations more accurately. However, because of the changes outlined below, the monthly information shown in the WPSR for 1981 and 1982 should not be directly compared to information for prior years. The series affected by the January 1981 changes are products supplied and production of motor gasoline, distillate fuel oil, and residual fuel oil.

### **Motor Gasoline Changes**

Prior to 1979, the EIA product supplied series for motor gasoline was consistently lower than the gasoline sales information collected by the Federal Highway Administration. There were two major reasons for the difference. First, refinery operations particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA prior to January 1981.

In January 1981, blending stations were added as reporters of motor gasoline production, and the reporting forms and definitions were changed to reflect more accurately the flow of products at refineries. For a further description of these changes and an indication of the magnitude of the difference between the old- and new-basis series, see Note 4 in the "Explanatory Notes" of the "Petroleum Supply Monthly."

### **Distillate and Residual Fuel Oil Changes**

The monthly statistics on production and product supplied of distillate and residual fuel oil for January 1981 forward reflect actual reported data even though these fuels can be further processed after initial distillation. The figures for prior years were adjusted to reflect the renaming or reclassifying of distillate and residual fuel oils as unfinished oils. Reclassification of these fuels might occur when a refiner ships a distillate or residual fuel oil to another refinery or to a bulk storage facility and the receiving facility, intending the oils to be processed further, reports the receipt of this fuel as a receipt of unfinished oils. Before January 1981, production statistics for distillate and residual fuel oils were adjusted to compensate for this problem on the basis of the difference between reported receipts and shipments of unfinished oils. Of the difference, two-thirds was allocated to distillate and one-third to residual. This adjustment was dropped in January 1981. Instead, the production statistics and products supplied estimates now reflect the data as reported. Monthly figures for total petroleum product supplied will not be affected by the change, however, because of an adjustment for "reclassified" product now shown in the monthly balance. The adjustments made in 1980 are shown in the table below. For further information about these changes, see Note 4 of the "Explanatory Notes" in the "Petroleum Supply Monthly."

### **Adjusted and Unadjusted Production of Distillate and Residual Fuel Oils by Month for 1980 (Thousand Barrels per Day)**

Month	Distillate Fuel Oil			Residual Fuel Oil		
	Adjusted	Unadjusted	Difference	Adjusted	Unadjusted	Difference
January	3,013	3,093	80	1,771	1,812	41
February	2,766	2,888	122	1,773	1,836	63
March	2,557	2,690	133	1,684	1,652	68
April	2,480	2,554	94	1,595	1,643	48
May	2,474	2,610	136	1,509	1,579	70
June	2,646	2,721	75	1,575	1,613	38
July	2,689	2,783	94	1,480	1,528	48
August	2,461	2,582	121	1,444	1,506	62
September	2,686	2,726	40	1,495	1,516	21
October	2,589	2,650	61	1,512	1,543	31
November	2,703	2,823	120	1,579	1,641	62
December	2,891	3,052	161	1,660	1,743	83
Average	2,661	2,764	103	1,580	1,634	54

Source: EIA, "Petroleum Supply Monthly," March 1982.

## Appendix E: Calculation of World Oil Prices (page 19)

The weighted average international price of oil, shown in the "Highlights" and on page 19, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 19, a list of major oil producing/exporting countries was chosen. For each country, the official selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Guide," "Platt's Oilgram Price Report," "Petroleum Intelligence Weekly," and "Europe Oil Prices") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative official crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

## Definitions

- Barrels throughout the report are 42-gallon barrels.
- **Crude Oil Inputs.** The total crude oil put into processing units at refineries. Crude oil inputs are a measure of the performance level of refineries and give an indication of the quantity of raw material actually being made into products such as gasoline, distillate fuel oil, and residual fuel oil.
- **Distillate Fuel Oils** (No. 1, 2, and No. 4 fuel oils and No. 1 and No. 2 diesel fuels) are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.
- **EIA Weekly Data.** These are preliminary figures based on data supplied to the EIA by selected petroleum companies; published figures include estimates for other, non-sampled companies based on currently available monthly data. Weekly data indicate broad trends such as increases or decreases in demand or production.
- Imports are defined in this report as gross imports. Imports of crude oil do not include imports to the Strategic Petroleum Reserve. Imports of minor products ("other oils"), as shown on page 15, include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils.
- Monthly Data for 1980 are from EIA, Energy Data Reports, "Petroleum Statement, Annual (Final Summary)." 1981 data are from the "Petroleum Supply Annual;" 1982 data are from the "Petroleum Supply Monthly." Information on stocks, product supplied, and production of refined products are collected from a universe of refiners, operators of bulk terminals, and pipeline operators. Companies supply monthly data after their records are finalized.
- **Motor Gasoline.** Included are finished leaded gasoline, finished unleaded gasoline, blending components in the gasoline range, and gasohol. This definition applies for data beginning with the week of January 30, 1981. Gasohol was not included in the motor gasoline definition before that date. Motor gasoline imports do not include gasohol.
- **Refinery Capacity Utilization** is the ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1981 the refinery capacity utilization for all U.S. refineries ranged between 87 percent and 66 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the type of products produced, and the operating conditions of the refinery.
- **Retail Motor Gasoline Prices.** The motor gasoline prices shown are calculated monthly by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).

acquisition cost of crude oil is the average by refiners for crude oil booked into their

refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned.<sup>1</sup> Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1131. Imported crude oil is either that oil reported on Form ERA-51, the "Transfer Pricing Report," or any crude oil which is not domestic oil. Prices do not include price of unfinished oils or SPR.

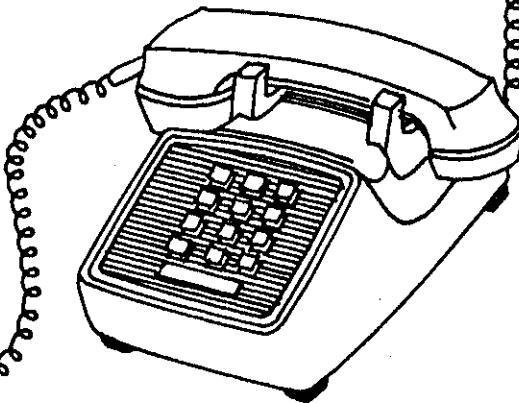
- **Residual Fuel Oils.** (No. 5 and No. 6 Fuel Oils) are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses.
- Stock figures shown here are for those stocks held at refineries, in pipelines, and at bulk terminals with a capacity over 50 thousand barrels. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded. All plant stocks were included in "Other Oils" and "Total."
- **Stock Change (Refined Products).** The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way: an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historical monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past six years; 2) using this daily rate and the minor stock level from the most recent monthly publication to estimate the minor product stock level for the current period.
- **Product Supplied** is a calculated value computed for specific products by adding domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total Products Supplied is calculated as inputs to refineries, plus estimated refinery gain, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks.
- The United States encompasses, for the purpose of this report, the 50 states and the District of Columbia. Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. totals.
- **Unaccounted-for crude oil** is a term which appears in U.S. Petroleum Balance table. It reconciles the difference between data (or estimates) about supply and data (or estimates) about use. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data on crude oil imports, production, stocks, refinery input, losses, exports, and transfers (crude oil burned directly as fuel oil). It reflects the quality of the estimates as well as the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using the final data. In fact, the published figures confirm this expectation. In the WPSR, four-week averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous years is considerably smaller than that for the current period.

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